

03.04-03/01/93-89

Baker

Baker Environmental, Inc.
Airport Office Park, Building 3
420 Rouser Road
Coraopolis, Pennsylvania 15108

(412) 269-6000
FAX (412) 269-2002

March 1, 1993

Commander
Atlantic Division
Naval Facilities Engineering Command
Building N-26, Naval Station
Norfolk, Virginia 23511-6287

Attn: Mr. Gary McSmith
Code 18235

Re: Contract N62470-89-D-4814
Navy CLEAN, District III
Contract Task Order 0179
St. Juliens Creek Annex - Soil Testing for MCON P-320
Portsmouth, Virginia

Dear Mr. McSmith:

This letter constitutes the draft report for the soil testing activities conducted at the MCON P-320 site at St. Juliens Creek Annex, Portsmouth, Virginia. The activities for this project were conducted at the request of LANTDIV under Contract Task Order 0179 (CTO-0179) to characterize the soils in the vicinity of three Solid Waste Management Units (SWMUs):

- SWMU-13: Repair and Maintenance Shop at Building 249
- SWMU-16: Sand Blasting Area at Building 323
- SWMU-20: Waste Generation Area No. 1

This letter report has been prepared on a quick turnaround basis at the request of LANTDIV. The following sections of this letter include brief discussions of the project objectives, the field activities conducted from February 17 through February 19, 1993, analytical results from the soil samples collected during the field investigation, and conclusions. Selected analytical results and associated waste disposal restrictions are presented in various tables included within this letter. Complete analytical and data validation results are given in Attachment A.

1.0 BACKGROUND AND OBJECTIVE

The primary areas of concern for this CTO are three Solid Waste Management Units (SWMUs). These are SWMU-13, Repair and Maintenance Shop at Building 249, SWMU-16, Sand Blasting Area at Building 323, and SWMU-20, Solid Waste Generation Area No. 1. These SWMUs are within the construction area of Military Construction Project P-320 (MCON P-320), Shore Intermediate Maintenance Activity Building.

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At the time field activities were conducted, construction activities had been initiated at the site. The above referenced buildings were demolished and removed from the site, excavation had occurred in the vicinity of SWMUs 16 and 20, and the SWMU-16/20 excavation had been backfilled with clean fill. Soils excavated from the SWMU-16/20 area had been stockpiled on site. No excavation had occurred at SWMU-13. Figure 1 provides a sketch of the site.

The objective of this project is to characterize the soils associated with SWMUs 13, 16, and 20 with respect to Toxicity Characteristic Leaching Procedure (TCLP) volatile organic compounds (VOCs), TCLP semivolatile organic compounds (SVOCs), TCLP pesticides, TCLP herbicides, TCLP metals, ignitability, corrosivity, reactivity, benzene, toluene, ethylbenzene and xylenes (BTEX), total petroleum hydrocarbons (TPH), total organic halogens (TOX), and paint filter liquids. The analytical results were compared to allowable Federal and State disposal regulations to determine potential soil disposition. Note that, as discussed below, not all of the samples that were collected for this project were analyzed for all of the above-mentioned parameters.

2.0 FIELD ACTIVITIES

Field activities for this CTO were conducted from February 17, 1993 to February 19, 1993. Field activities consisted primarily of collecting composite soil samples from the excavated SWMU-16 and 20 soil (SWMU-16/20 stockpile), collecting sidewall and composite saturated and unsaturated zone floor samples from the SWMU-16/20 excavation area, and collecting saturated and unsaturated zone composite soil samples for the proposed SWMU-13 excavation area. Each of these activities are briefly discussed below.

Sample handling and Quality Assurance procedures that were used for this project are discussed in the Draft Sampling and Analysis Plan for Military Construction Project P-320, St. Juliens Creek Annex, Portsmouth, Virginia, Contract Task Order 0072 (Baker, January 1992) and in a letter to Mr. Gary McSmith (LANTDIV EIC) from Mr. Richard Aschenbrenner (Baker Project Manager), dated February 19, 1993.

2.1 Stockpile Soil Sampling

A total of four composite soil samples were collected from the SWMU-16/20 excavated soil stockpile. The purpose of these samples was to determine whether the stockpiled soil is classified as a characteristic hazardous waste or a petroleum-contaminated material so that potential disposal options may be developed.

The stockpile composite soil samples consisted of a combination of 20 grab samples collected so as to be representative of the stockpiled materials. Figure 1 provides the approximate location of the stockpile and each of the grab samples. Three of the composite samples were designated as duplicate samples.

The grab samples were collected from 20 representative locations across the pile. In an effort to characterize both the surficial and subsurface stockpile soils, 8 grab samples

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were collected from the surface soils (0 to 0.5 feet) using a stainless steel spoon, 7 grab samples were collected from depths of 1 to 3 feet below the surface using a shovel and stainless steel spoon, and 5 grab samples were collected from depths of 3 to 5 feet below the ground surface using a bucket auger. The grab samples were placed in an eight quart stainless steel bowl, thoroughly mixed, and placed in the appropriate sample container for delivery to the laboratory. The 20 grab samples designated for VOC analysis were placed directly in the appropriate sample container and submitted to the laboratory for compositing under controlled conditions.

The composite soil sample and one of the duplicate composite samples (designated 19179-DP-01 and 19179-DP-02) were analyzed for TCLP VOCs, TCLP SVOCs, TCLP pesticides, TCLP herbicides, TCLP metals, ignitability, corrosivity, reactivity, BTEX, TPH, TOX, and paint filter liquids.

The remaining two duplicate samples (designated 19179-DP-01A and 19179-DP-01B) are being held at the laboratory. These samples may be analyzed for selected parameters, after review of the above analytical results, as a confirmation of the detected constituents.

A summary of the samples collected at the stockpile, the associated sample numbers and the applicable laboratory analyses are presented in Table 1.

2.2 Sidewall and Floor Soil Sampling at SWMUs 16 and 20

A total of seven environmental samples were collected from the SWMU-16/20 excavation area: five samples from the excavation sidewalls, one unsaturated zone composite soil sample from the excavation floor and one saturated zone composite soil sample. The purpose of the sidewall and composite floor samples is to determine whether additional excavation activities need to be conducted at this location to remove contaminated soils. The purpose of collecting the composite floor samples also is to give an indication as to whether additional construction activity below the water table (foundation excavation) will generate hazardous waste.

A total of five samples were collected from the approximate midpoint of each of the excavation sidewalls as shown on Figure 1. Since this excavation already has been backfilled, the samples were collected using a bucket auger. The soil collected from each of the five sidewall locations was composited from the ground surface to an approximate depth of three feet, for a total of five composite samples. These samples were given the designation 19179-1620-01 through 19179-1620-05.

Two composite soil samples were collected from 14 locations along the floor of the excavation. One of the composite samples consisted of 14 grab samples collected from the unsaturated soils at the fill-natural soil interface at a depth of approximately 2 feet below the ground surface. This sample was given the designation 19179-1620-06. The other composite sample also consisted of 14 grab samples. These samples were collected from the saturated soils at a depth of approximately 4 to 5 feet below the ground surface. The saturated zone composite soil sample was given the designation 19179-1620-07.

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Note that it was originally intended to collect 20 grab samples for each of the composites. However, frozen surface soils allowed for the collection of only 14 grab samples in the time allocated for the field activities. At all locations except SB-01 and SB-03, a backhoe was used to remove the frozen surface soils to a depth of approximately 0.5 feet. The backhoe also was used at SB-01 to remove pavement and base course materials to a depth of approximately 0.5 feet. A decontaminated bucket auger then was used to collect each composite sample. The grab samples were placed in an eight quart stainless steel bowl, thoroughly mixed, and placed in the appropriate sample containers for delivery to the laboratory. The composite samples for VOC analysis were collected as individual grab samples and submitted to the laboratory for compositing under controlled conditions.

The seven samples collected from the SWMU-16/20 site were submitted to the laboratory for analysis of TCLP VOCs, TCLP SVOCs, TCLP metals, BTEX, and TPH. Two duplicates of each composite sample also were submitted to the laboratory. The duplicates will be held at the laboratory; they may be analyzed for selected parameters, after review of the above analytical results, as a confirmation of the detected constituents. Table 2 provides a summary of the samples collected from the SWMU-16/20 area.

2.3 Soil Sampling at SWMU-13

The soil sampling at SWMU-13 consisted of the collection of a total of two composite soil samples from the proposed excavation area: one composite sample from the unsaturated zone and one from the saturated zone. The purpose of these samples is to determine whether the soils in this area will need to be handled as hazardous waste or petroleum-contaminated material upon excavation.

Each of the two composite samples consisted of 20 grab samples collected from 20 locations across the proposed excavation area, as shown on Figure 1. The unsaturated zone composite sample represents soil from the 0 to 2 foot depth below the ground surface and was given the sample designation 19179-13-01. The saturated zone composite sample represents soil from the 4 to 5 foot depth below the ground surface and was given the sample designation 19179-13-02.

The grab samples were collected using a stainless steel bucket auger with a dedicated bucket for each composite. The grab samples were placed in an eight quart stainless steel bowl, thoroughly mixed, and placed in the appropriate sample containers for delivery to the laboratory. The composite samples for VOC analysis were collected as individual grab samples and submitted to the laboratory for compositing under controlled conditions.

These composite samples were submitted to the laboratory for analysis of TCLP VOCs, TCLP SVOCs, TCLP pesticides, TCLP herbicides, TCLP metals, BTEX, and TPH. The composite soil sample collected from the unsaturated zone also was analyzed for TOX. Table 3 provides a summary of the samples collected from the SWMU-13 area.

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Two additional duplicates of each composite sample also were submitted to the laboratory. These samples were designated as 19179-13-01A, 19179-13-01B, 19179-13-02A, and 19179-13-02B. The duplicates will be held at the laboratory; they may be analyzed for selected parameters, after review of the above analytical results, as a confirmation of the detected constituents.

2.4 QA/QC Samples

QA/QC samples that were collected during the field activities, in addition to the extra duplicate samples, included eight trip blanks, one field blank, one equipment rinsate, and one matrix spike/matrix spike duplicate. These samples are summarized on Table 4.

3.0 ANALYTICAL RESULTS

The laboratory analysis that was performed on each sample is presented in the previous section. Following is a summary of the analytical testing methods that were employed on this project.

<u>Analytical Suite</u>	<u>Analytical Method</u>
TCLP VOCs	SW 846 1311/8240
TCLP SVOCs	SW 846 1311/8270
TCLP Pesticides	SW 846 1311/8080
TCLP Herbicides	SW 846 1311/8150
TCLP Metals	SW 846 1311/6000/7000
Ignitability	SW 846 1010
Corrosivity	USEPA 150.1
Reactivity	SW 846 7.3.3/7.3.4
BTEX	SW 846 8020
TPH	USEPA 418.1
TOX	SW 846 9020
Paint Filter test	SW 846 9095

The laboratory analysis and subsequent data validation were conducted using NEESA Level C Quality Control.

3.1 Regulatory Disposal Limits

The regulatory limits for determining whether a waste is hazardous by characteristic (i.e., the waste is classified as a D waste) are summarized on Table 5. Virginia disposal requirements, as specified in "Guidelines for the Disposal of Soil Contaminated with Petroleum Products", issued by the Commonwealth of Virginia in April 1990 are summarized in Table 6.

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3.2 Analytical Results for SWMU-16/20 Soil Stockpile Samples

The analytical results for the soil samples collected from the SWMU-16/20 soil stockpile showed no detects above the hazardous waste characteristic regulatory limits for TCLP parameters, ignitability, corrosivity, or reactivity, as presented in Table 5. Therefore, based on the sampling results for this project, the SWMU-16/20 soil stockpile is not classified by characteristic as a hazardous waste. The analytical results also indicate that concentrations of BTEX parameters (0.077 and 0.0512 mg/Kg) and TOX (6 and 15 mg/Kg) are below the Virginia regulatory limits of 10 mg/Kg and 100 mg/Kg, respectively. However, the soils did exhibit concentrations of Total Petroleum Hydrocarbons (160 mg/Kg and 250 mg/Kg) above the Virginia limit of 100 mg/kg. Therefore, the Commonwealth of Virginia guidelines for handling and disposal of petroleum contaminated soils must be followed.

3.3 Analytical Results for SWMU-16/20 Sidewall Samples

The analytical results for the soil samples collected from the SWMU-16/20 sidewalls (sample numbers 19197-1620-01 through 19197-162005) did not indicate TCLP parameters elevated above the applicable regulatory limits. Although other hazardous waste characteristics (ignitability, corrosivity, or reactivity) were not analyzed for, it is likely that the sidewall soils are not classified by characteristic as hazardous waste. The sidewall soil samples also did not exhibit concentrations of BTEX, TPH or TOX greater than Virginia regulatory limits. This data indicates that the limits of the SWMU-16/20 excavation were sufficient to meet the Commonwealth of Virginia requirements for cleanup of petroleum contaminated soil (refer to Table 6).

3.4 Analytical Results for SWMU-16/20 Excavation Floor Samples

The analytical results for the soil samples collected from the unsaturated and saturated zones beneath SWMU-16/20 excavation (sample numbers 19197-1620-06 and 19197-1620-07) did not indicate TCLP parameters elevated above the applicable regulatory limits. Although other hazardous waste characteristics (ignitability, corrosivity, or reactivity) were not analyzed for, it is likely that the excavation floor soils are not classified by characteristic as hazardous waste. The excavation floor samples also did not exhibit concentrations of BTEX, TPH or TOX greater than Virginia regulatory limits. This data indicates that the limits of the SWMU-16/20 excavation were sufficient to meet the Commonwealth of Virginia requirements for cleanup of petroleum contaminated soil (refer to Table 6).

3.5 Analytical Results for the SWMU-13 Soil Samples

The analytical results for the soil samples collected from the saturated and unsaturated zones beneath the proposed SWMU-13 excavation (sample numbers 19197-13-01 and 19197-13-02) did not indicate TCLP parameters elevated above the applicable regulatory limits. Although other hazardous waste characteristics (ignitability, corrosivity, or reactivity) were not analyzed for, it is likely that these soils are not classified by characteristic as hazardous waste. The analytical results also indicate concentrations of

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BTEX parameters (0.0066 and 0.0064 mg/Kg) and TOX (26 mg/Kg) below the Virginia regulatory limits of 10 mg/Kg and 100 mg/Kg, respectively.

The soils did exhibit elevated concentrations of Total Petroleum Hydrocarbons (410 mg/Kg in the unsaturated zone and 120 mg/Kg in the saturated zone). Therefore, the Commonwealth of Virginia guidelines for handling and disposal of petroleum contaminated soils must be followed. Additionally, since the saturated zone soils exhibited TPH concentrations greater than 50 mg/Kg, it may be necessary to increase the limits of the excavation, both laterally and vertically.

CONCLUSIONS

No TCLP volatile organic compounds, semivolatile organic compounds, pesticides, herbicides, or metals were detected above the applicable regulatory limit for any of the environmental samples collected for this project. Additionally, no environmental samples collected for this project exhibited other hazardous waste characteristics such as ignitability, corrosivity, or reactivity.

No BTEX or TOX results were detected in the environmental samples above the Commonwealth of Virginia concentration limits of 10 mg/Kg and 100 mg/Kg, respectively.

TPH compounds were detected in several of the soil samples submitted for laboratory analysis. Specifically, elevated TPH concentrations were detected in the SWMU-16/20 soil stockpile and in both the unsaturated and saturated soils in the proposed SWMU-13 excavation area.

These analytical results indicate the following:

1. The SWMU-16/20 soil stockpile is not classified as a hazardous waste. Therefore, it may be disposed of in a sanitary or industrial landfill as petroleum contaminated soil as per Virginia regulations.
2. Samples from the SWMU-16/20 excavation do not indicate the presence of hazardous waste or soil contaminated with petroleum products at high enough concentrations to warrant additional excavation.
3. The SWMU-13 samples indicate that material excavated from this area will not be classified as a hazardous waste, but need to be handled as a petroleum contaminated soil according to Virginia regulations. The area of excavation also may need to be expanded to remove soils with TPH concentrations greater than 50 mg/Kg.

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If you have questions or require additional information regarding this letter report,
please do not hesitate to contact me at (412) 269-2015.

Sincerely,

BAKER ENVIRONMENTAL, INC.



Richard P. Aschenbrenner
Project Manager

RPA/lmn

Attachments

Figure 1

Table 1

Table 2

Table 3

Table 4

Table 5

Table 6

Attachment A - Analytical Data and Validation Report

Tables and Figure

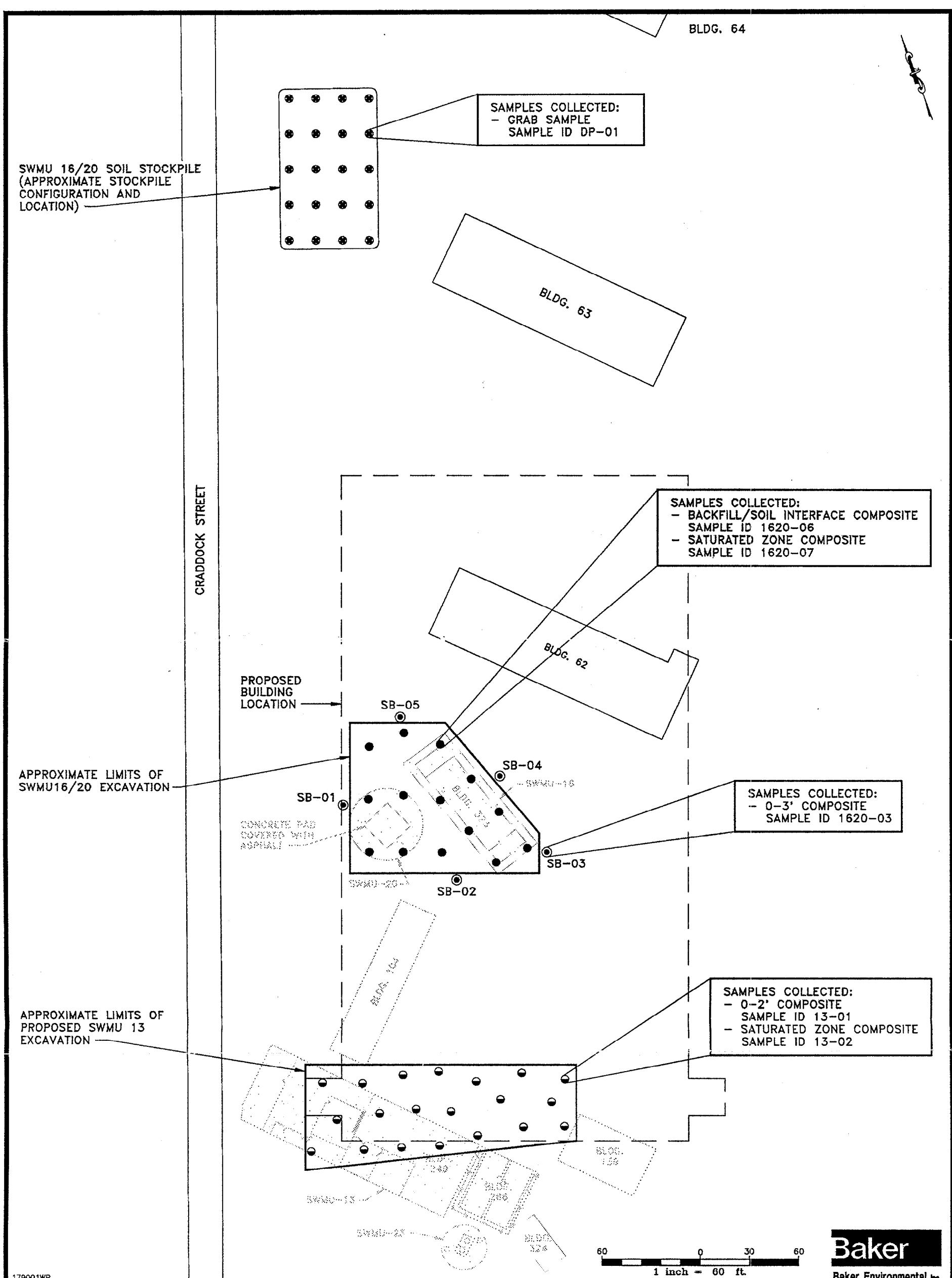


TABLE 1
SAMPLING SUMMARY
SOIL STOCKPILE FROM SWMU 16/20

Analysis	Number of Environmental Samples ⁽¹⁾ Sample No. 19179-DP-01	QA Duplicates Sample No. 19179-DP-02	Additional Duplicates Sample Nos. 19179-DP-01A and 19179-DP-01B
TCLP Volatile Organic Compounds	1	1	2
TCLP Semivolatile Organic Compounds	1	1	2
TCLP Pesticides	1	1	2
TCLP Herbicides	1	1	2
TCLP Metals	1	1	2
Ignitability	1	1	2
Corrosivity	1	1	2
Reactivity	1	1	2
BTEX	1	1	2
TPH	1	1	2
TOX	1	1	2
Paint Filter Liquids Test	1	1	2

(1) One composite consisting of approximately 20 grab samples.

TABLE 2

SAMPLING SUMMARY
SOIL SAMPLING AT SWMU 16/20

Analysis	Number of Environmental Samples(1)	Additional Duplicates(2)
TCLP Volatile Organic Compounds	7	14
TCLP Semivolatile Organic Compounds	7	14
TCLP Metals	7	14
BTEX	7	14
TPH	7	14

(1) Includes five sidewall composites (Sample Nos. 19179-1620-01 through 19179-1620-05), one unsaturated zone composite (Sample No. 19179-1620-06) and one saturated zone composite (Sample No. 19179-1620-07).

(2) Duplicates designated with an A or B (i.e., 19179-1620-01A).

TABLE 3

SAMPLING SUMMARY
SOIL SAMPLING AT SWMU-13

Analysis	Number of Environmental Samples(1)	Additional Duplicates
TCLP Volatile Organic Compounds	2	4
TCLP Semivolatile Organic Compounds	2	4
TCLP Pesticides	2	4
TCLP Herbicides	2	4
TCLP Metals	2	4
BTEX	2	4
TPH	2	4
TOX	1	2

- (1) One composite from the unsaturated zone (Sample No. 19179-13-01) and one composite from the saturated zone (Sample No. 19179-13-02).
(2) Duplicates designated as 19179-13-01A, 19179-13-01B, 19179-13-02A, and 19179-13-02B.

TABLE 4

SAMPLING SUMMARY
QA SAMPLES(1)

Analysis	Trip Blanks	Field Blanks	Equipment Rinsates	MS/MSD
TCLP Volatile Organic Compounds	8	1	1	1
TCLP Semivolatile Organic Compounds	--	1	1	1
TCLP Pesticides	--	1	1	1
TCLP Herbicides	--	1	1	1
TCLP Metals	--	1	1	1
Ignitability	--	--	--	--
Corrosivity	--	--	--	--
Reactivity	--	--	--	--
BTEX	--	1	1	1
TPH	--	1	1	1
TOX	--	1	1	1
Paint Filter Liquids Test	--	--	--	--

(1) Not including duplicates.

TABLE 5

MAXIMUM CONCENTRATION OF CONTAMINANTS FOR CHARACTERISTIC
OF TCLP TOXICITY

Contaminant	Regulatory Level (mg/L)	Regulatory Level (µg/L)
METALS		
Arsenic	5.0	5,000
Barium	100.0	100,000
Cadmium	1.0	1,000
Chromium	5.0	5,000
Lead	5.0	5,000
Mercury	0.2	200
Selenium	1.0	1,000
Silver	5.0	5,000
PESTICIDES		
Chlordane	0.03	30
Endrin	0.02	20
Heptachlor (and its hydroxide)	0.008	8
Lindane	0.4	400
Methoxychlor	10.0	10,000
Toxaphene	0.5	500
HERBICIDES		
2,4-D	10.0	10,000
2,4,5-TP Silvex	1.0	1,000
VOLATILES		
Benzene	0.5	500
Carbon tetrachloride	0.5	500
Chlorobenzene	100.0	100,000
Chloroform	6.0	6,000
1,2-Dichloroethane	0.5	500
1,1-Dichloroethylene	0.7	700
Methyl ethyl ketone	200.0	200,000
Tetrachloroethylene	0.7	700
Trichloroethylene	0.5	500
Vinyl chloride	0.2	200

TABLE 5
(Continued)
MAXIMUM CONCENTRATION OF CONTAMINANTS FOR
CHARACTERISTIC OF TCLP TOXICITY

Contaminant	Regulatory Level (mg/L)
SEMIVOLATILES	
o-Cresol	200.0
m-Cresol	200.0
p-Cresol	200.0
Cresol	200.0
1,4-Dichlorobenzene	7.5
2,4-Dinitrotoluene	0.13
Hexachlorobenzene	0.13
Hexachlorobutadiene	0.5
Hexachloroethane	3.0
Nitrobenzene	2.0
Pentachlorophenol	100.0
Pyridine	5.0
2,4,5-Trichlorophenol	400.0
2,4,6-Trichlorophenol	2.0

TABLE 6
**CRITERIA FOR APPROVAL OF DISPOSAL OF PETROLEUM-
 CONTAMINATED SOIL IN THE COMMONWEALTH OF VIRGINIA**

Action Allowed	Concentration Limit (mg/Kg)	Test
Soil used as clean fill.	Results <50 Results <10	TPH and BTEX
Disposed in any permitted sanitary or industrial landfill.	Results <100 Results <10	TPH and BTEX
Disposed in permitted industry or sanitary landfills equipped with liners and leachate collection systems.	Results <500 Results <10	TPH and BTEX
Cannot be disposed in any permitted industrial or sanitary landfill.	Results >500 Results >10	TPH and BTEX

Please note: Material containing greater than 100 mg/Kg TOX must not be disposed of until separate approval from Commonwealth of Virginia Department of Waste Management is granted.

Attachment A
Analytical Data and Validation Report



A Subsidiary of
The Dow Chemical Company

PGH-93-LWS-247

DATE February 25, 1993

TO Mr. Richard Aschenbrenner
Baker Environmental, Inc.
Airport Office Park, Building 3
420 Rouser Road
Coraopolis, Pennsylvania 15108

FROM L. W. Sumansky *Re:*
AWD Technologies, Inc.

SUBJECT Data Validation of
Inorganic Parameters and
Petroleum Hydrocarbons
Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX)

Re: St. Juliens Creek Annex

Enseco-Wadsworth/Alert Laboratories
Project 19179-70SRN

Samples:

<u>Lab Number</u>	<u>Client I.D.</u>
A3B180010-003	19179-DP-02
A3B180010-004	19179-DP-01
A35190005-001	19179-13-01
A35190005-004	19179-13-02
A35200004-001	19179-FB-01
A35200004-002	19197-1620-01
A35200004-005	19197-1620-02
A35200004-008	19197-1620-03
A35200004-011	19197-1620-04
A35200004-014	19197-1620-05
A35200004-017	19197-ER-01
A35200004-018	19197-1620-07
A35200004-021	19197-1620-06

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Overview

Thirteen (13) samples - 11 solids and 2 waters, were analyzed for:

- Total Organic Halogens (TOX)
- Total Recoverable Petroleum Hydrocarbons (TRPH)
- Reactive Cyanide
- Reactive Sulfide
- Paint Filter Test
- Flash Point - Pensky Martens
- pH - Solids and Aqueous
- Moisture, % - Solids
- BTEX

Summary

All compounds were successfully analyzed in all samples. The quality of analytical data was evaluated by the following parameters: holding times, initial calibrations, continuing calibrations, surrogate spikes, matrix spike/matrix spike duplicate (MS/MSD) recoveries, blank spike recoveries, laboratory and field blanks, compound identification and compound quantitation. Areas of concern with respect to data usability are discussed below.

The data were reviewed according to the QA/QC criteria for Level C data quality identified by the Naval Energy and Environmental Support Activity (NEESA) "Sampling and Chemical Analysis Quality Assurance Requirements for the Navy Installation Restoration Program " (NEESA 20.2-047B) document.

Minor Issues

The laboratory reported that the identification and quantitation of ethylbenzene and/or total xylenes are suspect because of hydrocarbon interferences. Because of the uncertainty introduced by these interferences, positive results for ethylbenzene and total xylenes are qualified "J", estimated, in samples 13-01, 13-02, and 1620-06.

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TO: Mr. Richard Aschenbrenner
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Information Regarding Report Content

Attachments:

1. Glossary of data qualifier codes.
2. Data Summary. This may include:
 - a) All positive results with qualifier codes, if applicable;
 - b) All unusable detection limits qualified with an "R"; and
 - c) All estimated detection limits qualified with UJ.
3. Appendix A - Results as Reported by the Laboratory.

GLOSSARY OF DATA QUALIFIER CODES ORGANIC ANALYSES

CODES RELATING TO IDENTIFICATION

NO CODE = CONFIRMED IDENTIFICATION

- U* = NOT DETECTED. The associated number indicates the Contract Required Quantitation Limit (CRQL) or the compound was not detected substantially above the level reported in laboratory or field blanks.
- R* = UNRELIABLE RESULT. Analyte may or may not be present in the sample. Supporting data are necessary to confirm result.

CODES RELATING TO QUANTITATION

- J* = ANALYTE PRESENT but reported value may not be accurate or precise.
- UJ* = NOT DETECTED. Quantitation limit may not be accurate or precise.

DATA SUMMARY

APPENDIX A
RESULTS AS REPORTED BY THE LABORATORY

DATA SUMMARY FORM:

DTEX
(ug/kg)

Site Name: SAINT JULIEN'S CREEK

Case #: 19179-70 Sampling Date: 2/7/93
SRN 19179-To calculate sample quantitation limit:
(CRQL * Dilution Factor)

Sample No.	1620-01	1620-02	1620-03	1620-04	1620-05	1620-06	1620-07	
Dilution Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	
% Moisture	12	14	14	13	16	14	16	
CRQL								
2 Benzene								
2 Toluene								
2 Ethylbenzene								
2 Xylenes (total)								
1 TOTAL ORGANIC HALOGENS (TOX) - mg/kg	NA	-						→
10 PETROLEUM HYDROCARBONS (TOTAL RECOVERABLE) mg/kg				15				
10 CYANIDE, REACTIVE (mg/kg)	NA	-						→
50 SULFIDE, REACTIVE (mg/kg)	NA	-						→
FLASH POINT (°F)	NA	-						→
P H	NA	-						→

CRQL = Contract_Required_Quantitation_Limit

NA = NOT ANALYZED

DATA SUMMARY FORM:

D_rEX
(ug/kg)

Site Name: SAINT JULIEN'S CREEK

Case #: 19179-70 Sampling Date: 2/17/83
SRN 19179-To calculate sample quantitation limit:
(CRQL * Dilution Factor)

Sample No.	DP-01	DP-02	B-01	B-02					
Dilution Factor	1.0	1.0	2.5	1.0					
% Moisture	13	14	14	16					
COMPOUND									
1 Benzene									
1 Toluene									
1 Ethylbenzene	31.5	23.8		2.8	J				
1 Xylenes (total)	77.0	51.2	6.6 J	6.4	J				
1 TOTAL ORGANIC HALOGENS (TOX) - mg/kg	6	15	26	NA					
10 PETROLEUM HYDROCARBONS (TOTAL RECONCILABLE) mg/kg	250	160	410	120					
10 CYANIDE, REACTIVE (mg/kg)			NA	NA					
50 SULFIDE, REACTIVE (mg/kg)			NA	NA					
FLASH POINT (°F)	>180	>180	NA	NA					
pH	5.7	6.0	NA	NA					

CRQL = Contract_Required_Quantitation_Limit

NA = NOT ANALYZED

DATA SUMMARY FORM:

Site Name: SAINT JULIEN'S CREEK

Case #: 19179-70-S01 Sampling Date: 2/17/93

BTEX
($\mu\text{g/l}$)

To calculate sample quantitation limit:
(CRQL * Dilution Factor)

CRQL = Contract Required Quantitation Limit

BAKER ENVIRONMENTAL INC

19179-DP-01 2-17-93 1830

WO #: B8353104

LAB #: A3B180010-004

MATRIX: SOLID

DATE RECEIVED: 2/18/93

BTEX

<u>PARAMETER</u>	<u>RESULT (ug/kg)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
Benzene	ND	2.3	SW846 8020	2/19/93	3053012
Toluene	ND	2.3	SW846 8020	2/19/93	3053012
Ethylbenzene	31.5	2.3	SW846 8020	2/19/93	3053012
Xylenes, Total	77.0	2.3	SW846 8020	2/19/93	3053012

SURROGATE RECOVERY%ACCEPTABLE LIMITS

Trifluorotoluene

113

(75 - 125)

OTE: DRY WEIGHT

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19179-DP-02 2-17-93 1830

WO #: B8352102
 LAB #: A3B180010-003
 MATRIX: SOLID

DATE RECEIVED: 2/18/93

BTEX

<u>PARAMETER</u>	<u>RESULT</u> (ug/kg)	<u>REPORTING</u> <u>LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION-</u> <u>ANALYSIS DATE</u>	<u>QC</u> <u>BATCH</u>
Benzene	ND	2.3	SW846 8020	2/18/93	3049022
Toluene	ND	2.3	SW846 8020	2/18/93	3049022
Ethylbenzene	23.8	2.3	SW846 8020	2/18/93	3049022
Xylenes, Total	51.2	2.3	SW846 8020	2/18/93	3049022

SURROGATE RECOVERY

%

ACCEPTABLE LIMITS

Trifluorotoluene

123

(75 - 125)

RE: DRY WEIGHT

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19179-13-01 2-18-93 1200

WO #: B8511102
 LAB #: A3B190005-001
 MATRIX: SOLID

DATE RECEIVED: 2/19/93

BTEX

<u>PARAMETER</u>	<u>RESULT (ug/kg)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS_DATE</u>	<u>QC BATCH</u>
Benzene	ND	5.8	SW846 8020	2/19/93	3053012
Toluene	ND	5.8	SW846 8020	2/19/93	3053012
Ethylbenzene	ND	5.8	SW846 8020	2/19/93	3053012
Xylenes, Total	6.6 *	5.8	SW846 8020	2/19/93	3053012

SURROGATE RECOVERY

%

ACCEPTABLE LIMITS

Trifluorotoluene 112 (75 - 125)

FE: DRY WEIGHT

ND (NONE DETECTED)

* DUE TO HYDROCARBON INTERFERENCE, THE IDENTIFICATION AND
 QUANTITATION OF COMPOUND MAY BE CONSIDERED SUSPECT.

BAKER ENVIRONMENTAL INC

19179-13-02 2-18-93 1200

WO #: B8520102

LAB #: A3B190005-004

MATRIX: SOLID

DATE RECEIVED: 2/19/93

- - - - - BTEX - - - - -

<u>PARAMETER</u>	<u>RESULT (ug/kg)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS_DATE</u>	<u>QC BATCH</u>
Benzene	ND	2.4	SW846 8020	2/19/93	3053012
Toluene	ND	2.4	SW846 8020	2/19/93	3053012
Ethylbenzene	2.8 *	2.4	SW846 8020	2/19/93	3053012
Xylenes, Total	6.4 *	2.4	SW846 8020	2/19/93	3053012

SURROGATE RECOVERY%ACCEPTABLE LIMITS

Trifluorotoluene

117

(75 - 125)

NOTE: DRY WEIGHT

ND (NONE DETECTED)

* DUE TO HYDROCARBON INTERFERENCE, THE IDENTIFICATION AND
QUANTITATION OF COMPOUND MAY BE CONSIDERED SUSPECT.

BAKER ENVIRONMENTAL INC

19197-1620-01 2-18-93 1615

WO #: B8716102
LAB #: A3B200004-002
MATRIX: SOLID

DATE RECEIVED: 2/20/93

BTEX

<u>PARAMETER</u>	<u>RESULT</u> (ug/kg)	<u>REPORTING</u> <u>LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION-</u> <u>ANALYSIS_DATE</u>	<u>QC</u> <u>BATCH</u>
Benzene	ND	2.3	SW846 8020	2/20/93	3053014
Toluene	ND	2.3	SW846 8020	2/20/93	3053014
Ethylbenzene	ND	2.3	SW846 8020	2/20/93	3053014
Xylenes, Total	ND	2.3	SW846 8020	2/20/93	3053014

SURROGATE RECOVERY%ACCEPTABLE LIMITS

Trifluorotoluene 84 (75 - 125)

STE: DRY WEIGHT
ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19197-1620-02 2-19-93 0900

WO #: B8728102
 LAB #: A3B200004-005
 MATRIX: SOLID

DATE RECEIVED: 2/20/93

BTEX

<u>PARAMETER</u>	<u>RESULT (ug/kg)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
Benzene	ND	2.3	SW846 8020	2/20/93	3053014
Toluene	ND	2.3	SW846 8020	2/20/93	3053014
Ethylbenzene	ND	2.3	SW846 8020	2/20/93	3053014
Xylenes, Total	ND	2.3	SW846 8020	2/20/93	3053014

<u>SURROGATE RECOVERY</u>	<u>%</u>	<u>ACCEPTABLE LIMITS</u>
Trifluorotoluene	82	(75 - 125)

FE: DRY WEIGHT
 ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19197-1620-03 2-18-93 1545

WO #: B8731104

LAB #: A3B200004-008

MATRIX: SOLID

DATE RECEIVED: 2/20/93

~~BTEX~~

<u>PARAMETER</u>	<u>RESULT (ug/kg)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
Benzene	ND	2.3	SW846 8020	2/20/93	3053014
Toluene	ND	2.3	SW846 8020	2/20/93	3053014
Ethylbenzene	ND	2.3	SW846 8020	2/20/93	3053014
Xylenes, Total	ND	2.3	SW846 8020	2/20/93	3053014

SURROGATE RECOVERY%ACCEPTABLE LIMITS

Trifluorotoluene

81

(75 - 125)

TE: DRY WEIGHT

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19197-1620-04 2-19-93 0930

WO #: B8734102

LAB #: A3B200004-011

MATRIX: SOLID

DATE RECEIVED: 2/20/93

- BTEX -

<u>PARAMETER</u>	<u>RESULT (ug/kg)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
Benzene	ND	2.3	SW846 8020	2/20/93	3053014
Toluene	ND	2.3	SW846 8020	2/20/93	3053014
Ethylbenzene	ND	2.3	SW846 8020	2/20/93	3053014
Xylenes, Total	ND	2.3	SW846 8020	2/20/93	3053014

SURROGATE RECOVERY%ACCEPTABLE LIMITS

Trifluorotoluene

76

(75 - 125)

OTE: DRY WEIGHT

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19197-1620-05 2-19-93 1000

WO #: B8737102

LAB #: A3B200004-014

MATRIX: SOLID

DATE RECEIVED: 2/20/93

- - - - - BTEX - - - - -

<u>PARAMETER</u>	<u>RESULT (ug/kg)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
Benzene	ND	2.4	SW846 8020	2/20/93	3053014
Toluene	ND	2.4	SW846 8020	2/20/93	3053014
Ethylbenzene	ND	2.4	SW846 8020	2/20/93	3053014
Xylenes, Total	ND	2.4	SW846 8020	2/20/93	3053014

SURROGATE RECOVERY

%

ACCEPTABLE LIMITS

Trifluorotoluene

105

(75 - 125)

OTE: DRY WEIGHT

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19197-1620-06 2-19-93 1200

WO #: B8744102

LAB #: A3B200004-021

MATRIX: SOLID

DATE RECEIVED: 2/20/93

- - - - - BTEX - - - - -

<u>PARAMETER</u>	<u>RESULT (ug/kg)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
Benzene	ND	2.3	SW846 8020	2/20/93	3053014
Toluene	ND	2.3	SW846 8020	2/20/93	3053014
Ethylbenzene	8.2 *	2.3	SW846 8020	2/20/93	3053014
Xylenes, Total	11.4 *	2.3	SW846 8020	2/20/93	3053014

SURROGATE RECOVERY%ACCEPTABLE LIMITS

Trifluorotoluene 100 (75 - 125)

OTE: AS RECEIVED

ND (NONE DETECTED)

* DUE TO HYDROCARBON INTERFERENCE, THE IDENTIFICATION AND
QUANTITATION OF COMPOUND MAY BE CONSIDERED SUSPECT.

BAKER ENVIRONMENTAL INC

19197-1620-07 2-19-93 1200

WO #: B8741102

LAB #: A3B200004-018

MATRIX: SOLID

DATE RECEIVED: 2/20/93

BTEX

<u>PARAMETER</u>	<u>RESULT (ug/kg)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
Benzene	ND	2.4	SW846 8020	2/20/93	3053014
Toluene	ND	2.4	SW846 8020	2/20/93	3053014
Ethylbenzene	ND	2.4	SW846 8020	2/20/93	3053014
Xylenes, Total	ND	2.4	SW846 8020	2/20/93	3053014

SURROGATE RECOVERY

%

ACCEPTABLE LIMITS

Trifluorotoluene

80

(75 - 125)

TE: DRY WEIGHT

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19197-ER-01 2-19-93 1100

WO #: B8740102
 LAB #: A3B200004-017
 MATRIX: WATER

DATE RECEIVED: 2/20/93

BTEX

<u>PARAMETER</u>	<u>RESULT</u> (ug/L)	<u>REPORTING</u> <u>LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION-</u> <u>ANALYSIS DATE</u>	<u>QC</u> <u>BATCH</u>
Benzene	ND	1	SW846 8020	2/20/93	3053013
Toluene	ND	1	SW846 8020	2/20/93	3053013
Ethylbenzene	ND	1	SW846 8020	2/20/93	3053013
Xylenes, Total	ND	1	SW846 8020	2/20/93	3053013

SURROGATE RECOVERY%ACCEPTABLE LIMITS

Trifluorotoluene 81 (75 - 125)

JTE: AS RECEIVED
 ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19179-FB01 2-19-93 1100

WO #: B8708102

LAB #: A3B200004-001

MATRIX: WATER

DATE RECEIVED: 2/20/93

BTEX

<u>PARAMETER</u>	<u>RESULT (ug/L)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
Benzene	ND	1	SW846 8020	2/20/93	3053013
Toluene	ND	1	SW846 8020	2/20/93	3053013
Ethylbenzene	ND	1	SW846 8020	2/20/93	3053013
Xylenes, Total	ND	1	SW846 8020	2/20/93	3053013

SURROGATE RECOVERY%ACCEPTABLE LIMITS

Trifluorotoluene

90

(75 - 125)

NOTE: AS RECEIVED

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19179-DP-01 2-17-93 1830

WO #: B8353
 LAB #: A3B180010-004
 MATRIX: SOLID

DATE RECEIVED: 2/18/93

- - - - - INORGANIC ANALYTICAL REPORT - - - - -

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNIT</u>	<u>METHOD</u>	<u>PREPARATION - ANALYSIS DATE</u>	<u>QC BATCH</u>
Total Organic Halogens (TOX)	6	1	mg/kg	SW846 9020 M	2/20/93	3051017
Petroleum Hydrocarbons	250	23	mg/kg	USEPA 418.1	2/19/93	3050006
Total Recoverable						
Paint Filter Test	NEGATIVE			SW846 9095	2/19/93	3050021
Cyanide, Reactive	ND	11	mg/kg	SW846 7.3.3.	2/19/93	3050052
Sulfide, Reactive	ND	57	mg/kg	SW846 7.3.4.	2/19/93	3050053
Flash Point - Pensky Martens	>180		deg F	SW846 1010 M	2/19/93	3050020
pH-Solid	5.7		su	USEPA 150.1	2/18/93	3049046
% MOISTURE	13	0.5	%	USEPA 160.3	2/19/93	3050015

NOTE: AS RECEIVED

ND (NONE DETECTED)

DRY WEIGHT

BAKER ENVIRONMENTAL INC

19179-DP-02 2-17-93 1830

WO #: B8352
 LAB #: A3B180010-003
 MATRIX: SOLID

DATE RECEIVED: 2/18/93

- - - - - INORGANIC ANALYTICAL REPORT - - - - -

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNIT</u>	<u>METHOD</u>	<u>PREPARATION - ANALYSIS DATE</u>	<u>QC BATCH</u>
Total Organic Halogens (TOX)	15	1	mg/kg	SW846 9020 M	2/20/93	3051017
Petroleum Hydrocarbons	160	12	mg/kg	USEPA 418.1	2/19/93	3050006
Total Recoverable						
Paint Filter Test	NEGATIVE			SW846 9095	2/19/93	3050021
Cyanide, Reactive	ND	12	mg/kg	SW846 7.3.3.	2/19/93	3050052
Sulfide, Reactive	ND	58	mg/kg	SW846 7.3.4.	2/19/93	3050053
Flash Point - Pensky Martens	>180		deg F	SW846 1010 M	2/19/93	3050020
pH-Solid	6.0		su	USEPA 150.1	2/18/93	3049046
% MOISTURE	14	0.5	%	USEPA 160.3	2/19/93	3050015

NOTE: AS RECEIVED
 ND (NONE DETECTED)
 DRY WEIGHT

BAKER ENVIRONMENTAL INC

19179-13-01 2-18-93 1200

WO #: B8511
LAB #: A3B190005-001
MATRIX: SOLID

DATE RECEIVED: 2/19/93

INORGANIC ANALYTICAL REPORT

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING			<u>METHOD</u>	<u>PREPARATION - ANALYSIS DATE</u>	<u>QC BATCH</u>
		<u>LIMIT</u>	<u>UNIT</u>				
Total Organic Halogens (TOX)	26	1	mg/kg	SW846 9020 M	2/20/93		3051017
Petroleum Hydrocarbons	410	12	mg/kg	USEPA 418.1	2/20-	2/21/93	3051011
Total Recoverable							
% MOISTURE	14	0.5	%	USEPA 160.3	2/19-	2/20/93	3050063

NOTE: DRY WEIGHT

BAKER ENVIRONMENTAL INC

19179-13-02 2-18-93 1200

WO #: B8520

LAB #: A3B190005-004

MATRIX: SOLID

DATE RECEIVED: 2/19/93

- - - - - INORGANIC ANALYTICAL REPORT - - - - -

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNIT</u>	<u>METHOD</u>	<u>PREPARATION - ANALYSIS DATE</u>	<u>QC BATCH</u>
Petroleum Hydrocarbons Total Recoverable	120	12	mg/kg	USEPA 418.1	2/20 - 2/21/93	3051011
% MOISTURE	16	0.5	%	USEPA 160.3	2/19 - 2/20/93	3050063

NOTE: DRY WEIGHT

BAKER ENVIRONMENTAL INC

19179-FB01 2-19-93 1100

WO #: B8708
 LAB #: A3B200004-001
 MATRIX: WATER

DATE RECEIVED: 2/20/93

INORGANIC ANALYTICAL REPORT

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING			<u>METHOD</u>	<u>PREPARATION - ANALYSIS DATE</u>	<u>QC BATCH</u>
		<u>LIMIT</u>	<u>UNIT</u>				
Flash Point Closed Cup	>180		deg F	SW846 1010	2/20/93	3051012	
Petroleum Hydrocarbons	ND	0.5	mg/L	USEPA 418.1	2/21/93	3053007	
Total Recoverable							
Total Organic Halogens	ND	10	ug/L	SW846 9020	2/20/93	3051017	
pH Aqueous	6.4		su	SW846 9040	2/20/93	3051016	
Cyanide, Reactive	ND	10	mg/kg	SW846 7.3.3.	2/20/93	3051013	
Sulfide, Reactive	ND	50	mg/kg	SW846 7.3.4.	2/20/93	3051014	

NOTE: AS RECEIVED
 ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19197-1620-01 2-18-93 1615

WO #: B8716
LAB #: A3B200004-002
MATRIX: SOLID

DATE RECEIVED: 2/20/93

- - - - - INORGANIC ANALYTICAL REPORT - - - - -

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNIT</u>	<u>METHOD</u>	<u>PREPARATION - ANALYSIS DATE</u>	<u>QC BATCH</u>
Petroleum Hydrocarbons Total Recoverable	ND	11	mg/kg	USEPA 418.1	2/20- 2/21/93	3051011
% MOISTURE	12	0.5	%	USEPA 160.3	2/20- 2/21/93	3051015

NOTE: DRY WEIGHT
ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19197-1620-02 2-19-93 0900

WO #: B8728
LAB #: A3B200004-005
MATRIX: SOLID

DATE RECEIVED: 2/20/93

- - - - - INORGANIC ANALYTICAL REPORT - - - - -

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNIT</u>	<u>METHOD</u>	<u>PREPARATION - ANALYSIS DATE</u>	<u>QC BATCH</u>
Petroleum Hydrocarbons Total Recoverable	ND	12	mg/kg	USEPA 418.1	2/20- 2/21/93	305101:
% MOISTURE	14	0.5	%	USEPA 160.3	2/20- 2/21/93	305101:

NOTE: DRY WEIGHT
ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19197-1620-03 2-18-93 1545

WO #: B8731

LAB #: A3B200004-008

MATRIX: SOLID

DATE RECEIVED: 2/20/93

- - - - - INORGANIC ANALYTICAL REPORT - - - - -

<u>PARAMETER</u>	REPORTING			<u>METHOD</u>	<u>PREPARATION - ANALYSIS DATE</u>	<u>QC BATCH</u>
	<u>RESULT</u>	<u>LIMIT</u>	<u>UNIT</u>			
Petroleum Hydrocarbons Total Recoverable	ND	12	mg/kg	USEPA 418.1	2/20- 2/21/93	3051011
% MOISTURE	14	0.5	%	USEPA 160.3	2/20- 2/21/93	3051015

NOTE: DRY WEIGHT

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19197-1620-04 2-19-93 0930

WO #: B8734

LAB #: A3B20004-011

MATRIX: SOLID

DATE RECEIVED: 2/20/93

- - - - - INORGANIC ANALYTICAL REPORT - - - - -

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNIT</u>	<u>METHOD</u>	<u>PREPARATION - ANALYSIS DATE</u>	<u>QC BATCH</u>
Petroleum Hydrocarbons Total Recoverable	15	12	mg/kg	USEPA 418.1	2/20- 2/21/93	305101:
% MOISTURE	13	0.5	%	USEPA 160.3	2/20- 2/21/93	305101:

NOTE: DRY WEIGHT

BAKER ENVIRONMENTAL INC

19197-1620-05 2-19-93 1000

WO #: B8737

LAB #: A3B200004-014

MATRIX: SOLID

DATE RECEIVED: 2/20/93

- - - - - INORGANIC ANALYTICAL REPORT - - - - -

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNIT</u>	<u>METHOD</u>	<u>PREPARATION - ANALYSIS DATE</u>	<u>QC BATCH</u>
Petroleum Hydrocarbons Total Recoverable	ND	12	mg/kg	USEPA 418.1	2/20 - 2/21/93	3051011
% MOISTURE	16	0.5	%	USEPA 160.3	2/20 - 2/21/93	3051015

NOTE: DRY WEIGHT

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19197-ER-01 2-19-93 1100

WO #: B8740
 LAB #: A3B200004-017
 MATRIX: WATER

DATE RECEIVED: 2/20/93

INORGANIC ANALYTICAL REPORT

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u>			<u>METHOD</u>	<u>PREPARATION - ANALYSIS DATE</u>	<u>QC BATCH</u>
		<u>LIMIT</u>	<u>UNIT</u>				
Flash Point Closed Cup	>180		deg F	SW846 1010		2/20/93	3051012
Petroleum Hydrocarbons	ND	0.5	mg/L	USEPA 418.1		2/21/93	3053007
Total Recoverable							
Total Organic Halogens	ND	10	ug/L	SW846 9020		2/20/93	3051017
pH Aqueous	6.2		su	SW846 9040		2/20/93	3051016
Cyanide, Reactive	ND	10	mg/kg	SW846 7.3.3.		2/20/93	3051013
Sulfide, Reactive	ND	50	mg/kg	SW846 7.3.4.		2/20/93	3051014

NOTE: AS RECEIVED

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19197-1620-07 2-19-93 1200

WO #: B8741

LAB #: A3B200004-018

MATRIX: SOLID

DATE RECEIVED: 2/20/93

- - - - - INORGANIC ANALYTICAL REPORT - - - - -

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING			<u>METHOD</u>	<u>PREPARATION - ANALYSIS DATE</u>	<u>QC BATCH</u>
		<u>LIMIT</u>	<u>UNIT</u>				
Petroleum Hydrocarbons Total Recoverable	ND	12	mg/kg	USEPA 418.1	2/20-	2/21/93	3051011
% MOISTURE	16	0.5	%	USEPA 160.3	2/20-	2/21/93	3051015

NOTE: DRY WEIGHT

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19197-1620-06 2-19-93 1200

WO #: B8744
LAB #: A3B200004-021
MATRIX: SOLID

DATE RECEIVED: 2/20/93

- - - - - INORGANIC ANALYTICAL REPORT - - - - -

<u>PARAMETER</u>	<u>RESULT</u>	REPORTING			<u>METHOD</u>	<u>PREPARATION - ANALYSIS DATE</u>	<u>QC BATCH</u>
		<u>LIMIT</u>	<u>UNIT</u>				
Petroleum Hydrocarbons Total Recoverable	ND	12	mg/kg	USEPA 418.1	2/20-	2/21/93	3051011
% MOISTURE	14	0.5	%	USEPA 160.3	2/20-	2/21/93	3051015

NOTE: DRY WEIGHT
ND (NONE DETECTED)



*A Subsidiary of
The Dow Chemical Company*

PGH-93-RKC-254

DATE February 26, 1993

TO Mr. Richard Aschenbrenner
Baker Environmental, Inc.
Airport Office Park, Building 3
420 Rouser Road
Coraopolis, Pennsylvania 15108

FROM Gina Kelly 
AWD Technologies, Inc.

SUBJECT Data Validation of
TCLP Analytical Parameters

Re: St. Juliens Creek Annex

Enseco-Wadsworth/Alert Laboratories
Project 19179-70SRN, 19179-80SRN

Samples:

Client I.D.

19179-DP-02	19197-ER-01
19179-DP-01	19197-1620-07
19179-13-01	19197-1620-06
19179-13-02	19197-TB-01
19179-FB-01	19197-TB-02
19197-1620-01	19197-TB-03
19197-1620-02	19197-TB-04
19197-1620-03	19197-TB-05
19197-1620-04	19197-TB-06
19197-1620-05	19197-TB-07
	19197-TB-08

AWD Technologies, Inc.

Penn Center West Building III Suite 300 Pittsburgh Pennsylvania 15276 Telephone 412 788 2717 Fax 412 788 1316

PGH-93-RKC-254

TO: Mr. Richard Aschenbrenner
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Overview

Aqueous and solid samples were analyzed for RCRA, TCLP parameters as follows:

- Volatile Organic Compounds (21)
- Semivolatile Organic Compounds (13)
- Metals (13)
- Pesticides (13)
- Herbicides (13)

Summary

All parameters were determined successfully in both solid and water matrices.

The criteria used to evaluate data included:

- Holding times
- Calibrations
- Field and laboratory blanks
- Matrix and blank spikes
- Matrix spike duplicate analysis
- Surrogate recovery
- GC/MS tuning
- Laboratory control sample analysis
- Qualitative and quantitative analyte determinations and transcription

The attached data summary lists all data and qualifying acronyms which are defined in the attached glossary. Technical problems affecting the reliability and usability of the analytical data are described below according to severity.

Minor Issues

Levels of barium, cadmium, chromium, lead, and silver were reported in field and/or laboratory blanks. Therefore, sample results less than 10 times the highest concentration reported in laboratory blanks or less than 5 times the highest level reported in field blanks are qualified "J", estimated.

The data were reviewed according to the QA/QC criteria for Level C data quality identified by the Naval Energy and Environmental Support Activity (NEESA) "Sampling and Chemical Analysis Quality Assurance Requirements for the Navy Installation Restoration Program " (NEESA 20.2-047B) document.

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The data should be accepted as qualified.

Information Regarding Report Content

Attachments:

1. Glossary of data qualifier codes.
2. Data Summary. This may include:
 - a) All positive results with qualifier codes, if applicable;
 - b) All unusable detection limits qualified with an "R"; and
 - c) All estimated detection limits qualified with UJ.
3. Appendix A - Results as Reported by the Laboratory.
4. Appendix B - Tentatively Identified Compounds (TICs).
5. Appendix C - Support Documentation includes details to support the statements made in this report.

GLOSSARY OF DATA QUALIFIER CODES ORGANIC ANALYSES

CODES RELATING TO IDENTIFICATION

NO CODE = CONFIRMED IDENTIFICATION

U = **NOT DETECTED**. The associated number indicates the Contract Required Quantitation Limit (CRQL) or the compound was not detected substantially above the level reported in laboratory or field blanks.

R = **UNRELIABLE RESULT**. Analyte may or may not be present in the sample. Supporting data are necessary to confirm result.

CODES RELATING TO QUANTITATION

J = **ANALYTE PRESENT** but reported value may not be accurate or precise.

UJ = **NOT DETECTED**. Quantitation limit may not be accurate or precise.

DATA SUMMARY

DATA SUMMARY FORM:

Site Name: St. Juliens Creek Annex

Case #: **Sampling Date:**

TCLP

**VOLATILE ORGANIC COMPOUNDS
(mg/l)**

To calculate sample quantitation limit:

$Z_9 = \frac{CRQL}{Dilution\ Factor}$

CRQL = Contract Required Quantitation Limit

DATA SUMMARY FORM:

Site Name: St Julians Creek Annex

Case #: **Sampling Date:**

Sampling Date:

TCL.P

VOLATILE ORGANIC COMPOUNDS

(mg/l)

To calculate sample quantitation limit:

\rightarrow (CBQI : Dilution Factor)

CRQL = Contract Required Quantitation Limit

DATA SUMMARY FORM:

Site Name: St. Juliens Creek Annex

Case #: **Sampling Date:**

Sampling Date:

19179- 19179- 19179-

TCLP

**VOLATILE ORGANIC COMPOUNDS
(mg/l)**

To calculate sample quantitation limit:
(CRQL * Dilution Factor)

CRQL = Contract Required Quantitation Limit

DATA SUMMARY FORM:

Site Name: St. Juliens Creek Annex

TCLP

Semivolatile Organic Compounds

(mg/l)

To calculate sample quantitation limit:

Case #: **Sampling Date:**

Sampling Date:

Date:

19179- 19179- 19179- 19179- 19179- 19179- (CRQL * Dilution Factor) 19179- 19179-

CRQL = Contract_Required_Quantitation_Limit

DATA SUMMARY FORM:

Site Name: St. Juliers Creek Annex

Case #: _____ Sampling Date: _____
19179- 19179-

TCLP

Semivolatile Organic Compounds

(mg/l)

To calculate sample quantitation limit:
(CRQL * Dilution Factor)

CRQL = Contract Required Quantitation Limit

DATA SUMMARY FORM:

Site Name: St. Juliens Creek Annex

TCLP
PESTICIDES AND HERBICIDES
(mg/l)

Case #: _____ Sampling Date: _____ PESTICIDES AND HERBICIDES (mg/l) To calculate sample quantitation limit:
 19179- 19179- 19179- 19179- 19179- 19179- 19179- 19179- 19179-
 Sample No. DP-01 DP-02 13-01 13-02 1620-01 1620-02 1620-03 1620-04 1620-05

CRQL = Contract Required Quantitation Limit

DATA SUMMARY FORM:

Site Name: St. Juliens Creek Annex

Case #: _____ **Sampling Date:** _____

**TCLP
PESTICIDES AND HERBICIDES
(mg/l)**

To calculate sample quantitation limit:
(CRQL * Dilution Factor)

CROL = Contract Required Quantitation Limit

R. METALS

Site Name: St. Juliens Creek Annex

(mg/l)

Case #: _____ **Sampling Date:** _____

CRQL = Contract Required Quantitation Limit

RCRA METALS

Site Name: St. Juliens Creek Annex

(mg/l)

Case #: _____ **Sampling Date:** _____

19179- 19179- 19179- 19179-

CRQL = Contract Required Quantitation Limit

APPENDIX A

RESULTS AS REPORTED BY THE LABORATORY

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ENSECO-WADSWORTH/ALERT Contract:-

DP-01

Lab Code: WADS Case No.: SAS No.: SDG No.: 19179

Matrix: (soil/water) WATER Lab Sample ID: B8345115

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: VOL6826

Level: (low/med) LOW Date Received: 2/18/93

% Moisture: not dec. Date Analyzed: 2/21/93

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
---------	----------	---	------	---

75-01-4-----	Vinyl Chloride	50.	U
75-35-4-----	1,1-Dichloroethene	25.	U
67-66-3-----	Chloroform	25.	U
107-06-2-----	1,2-Dichloroethane	25.	U
78-93-3-----	2-Butanone	250.	U
56-23-5-----	Carbon Tetrachloride	25.	U
79-01-6-----	Trichloroethene	25.	U
71-43-2-----	Benzene	25.	U
127-18-4-----	Tetrachloroethene	25.	U
108-90-7-----	Chlorobenzene	25.	U
108-88-3-----	Toluene	25.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

DP-02

o Name:ENSECO-WADSWORTH/ALERT Contract:-

Lab Code:WADS Case No.: SAS No.: SDG No.:19179

Matrix: (soil/water) WATER Lab Sample ID:B8510101

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: VOL6827

Level: (low/med) LOW Date Received: 2/19/93

% Moisture: not dec. Date Analyzed: 2/21/93

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4-----	Vinyl Chloride	50.	U
75-35-4-----	1,1-Dichloroethene	25.	U
67-66-3-----	Chloroform	25.	U
107-06-2-----	1,2-Dichloroethane	25.	U
78-93-3-----	2-Butanone	250.	U
56-23-5-----	Carbon Tetrachloride	25.	U
79-01-6-----	Trichloroethene	25.	U
71-43-2-----	Benzene	25.	U
127-18-4-----	Tetrachloroethene	25.	U
108-90-7-----	Chlorobenzene	25.	U
108-88-3-----	Toluene	25.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ENSECO-WADSWORTH/ALERT

Contract:-

12-01

Lab Code: WADS

Case No.:

SAS No.:

SDG No.: 19179

Matrix: (soil/water) WATER

Lab Sample ID: B8515111

Sample wt/vol: 5.00 (g/ml) ML

Lab File ID: VOL6828

Level: (low/med) LOW

Date Received: 2/19/93

GC Column: DB624 ID: 0.53 (mm)

Dilution Factor: 5.0

Soil Extract Volume: 0

(uL)

Soil Aliquot Volume: 0 (uL)

CAS NO.

COMPOUND

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Q

75-01-4-----	Vinyl Chloride	50.	U
75-35-4-----	1,1-Dichloroethene	25.	U
67-66-3-----	Chloroform	25.	U
107-06-2-----	1,2-Dichloroethane	25.	U
78-93-3-----	2-Butanone	250.	U
56-23-5-----	Carbon Tetrachloride	25.	U
79-01-6-----	Trichloroethene	25.	U
71-43-2-----	Benzene	25.	U
127-18-4-----	Tetrachloroethene	25.	U
108-90-7-----	Chlorobenzene	25.	U
108-88-3-----	Toluene	25.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-01

Lab Name:ENSECO-WADSWORTH/ALERT Contract:-

Lab Code:WADS Case No.: SAS No.: SDG No.:19179

Matrix: (soil/water) WATER Lab Sample ID:B8518101

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: VOL6829

Level: (low/med) LOW Date Received: 2/19/93

% Moisture: not dec. Date Analyzed: 2/21/93

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4-----	Vinyl Chloride	10.	U
75-35-4-----	1,1-Dichloroethene	5.	U
67-66-3-----	Chloroform	5.	U
107-06-2-----	1,2-Dichloroethane	5.	U
78-93-3-----	2-Butanone	50.	U
56-23-5-----	Carbon Tetrachloride	5.	U
79-01-6-----	Trichloroethene	5.	U
71-43-2-----	Benzene	5.	U
127-18-4-----	Tetrachloroethene	5.	U
108-90-7-----	Chlorobenzene	5.	U
108-88-3-----	Toluene	5.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13-02

Lab Name:ENSECO-WADSWORTH/ALERT Contract:-

Lab Code:WADS Case No.: SAS No.: SDG No.:19179

Matrix: (soil/water) WATER Lab Sample ID:B8523111

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: VOL6830

Level: (low/med) LOW Date Received: 2/19/93

% Moisture: not dec. Date Analyzed: 2/21/93

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
---------	----------	--	---

75-01-4-----	Vinyl Chloride	50.	U
75-35-4-----	1,1-Dichloroethene	25.	U
67-66-3-----	Chloroform	25.	U
107-06-2-----	1,2-Dichloroethane	25.	U
78-93-3-----	2-Butanone	250.	U
56-23-5-----	Carbon Tetrachloride	25.	U
79-01-6-----	Trichloroethene	25.	U
71-43-2-----	Benzene	25.	U
127-18-4-----	Tetrachloroethene	25.	U
108-90-7-----	Chlorobenzene	25.	U
108-88-3-----	Toluene	25.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-02

Lab Name:ENSECO-WADSWORTH/ALERT Contract:-

Lab Code:WADS Case No.: SAS No.: SDG No.:19179

Matrix: (soil/water) WATER Lab Sample ID:B8525101

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: VOL6831

Level: (low/med) LOW Date Received: 2/19/93

% Moisture: not dec. Date Analyzed: 2/21/93

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4-----	Vinyl Chloride	10.	U
75-35-4-----	1,1-Dichloroethene	5.	U
67-66-3-----	Chloroform	5.	U
107-06-2-----	1,2-Dichloroethane	5.	U
78-93-3-----	2-Butanone	50.	U
56-23-5-----	Carbon Tetrachloride	5.	U
79-01-6-----	Trichloroethene	5.	U
71-43-2-----	Benzene	5.	U
127-18-4-----	Tetrachloroethene	5.	U
108-90-7-----	Chlorobenzene	5.	U
108-88-3-----	Toluene	5.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1620-06

→ Name:ENSECO-WADSWORTH/ALERT Contract:-

Lab Code:WADS Case No.: SAS No.: SDG No.:19179

Matrix: (soil/water) WATER Lab Sample ID:B8698109

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: VOL6848

Level: (low/med) LOW Date Received: 2/20/93

% Moisture: not dec. Date Analyzed: 2/22/93

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

75-01-4-----	Vinyl Chloride	50.	U
75-35-4-----	1,1-Dichloroethene	25.	U
67-66-3-----	Chloroform	25.	U
107-06-2-----	1,2-Dichloroethane	25.	U
78-93-3-----	2-Butanone	250.	U
56-23-5-----	Carbon Tetrachloride	25.	U
79-01-6-----	Trichloroethene	25.	U
71-43-2-----	Benzene	25.	U
127-18-4-----	Tetrachloroethene	25.	U
108-90-7-----	Chlorobenzene	25.	U
108-88-3-----	Toluene	25.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ENSECO-WADSWORTH/ALERT Contract:-

1620-07

Lab Code: WADS Case No.: SAS No.: SDG No.: 19179

Matrix: (soil/water) WATER Lab Sample ID: B8697109

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: VOL6850

Level: (low/med) LOW Date Received: 6/20/93

% Moisture: not dec. Date Analyzed: 2/22/93

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

CONCENTRATION UNITS:
CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

75-01-4-----	Vinyl Chloride	50.	U
75-35-4-----	1,1-Dichloroethene	25.	U
67-66-3-----	Chloroform	25.	U
107-06-2-----	1,2-Dichloroethane	25.	U
78-93-3-----	2-Butanone	250.	U
56-23-5-----	Carbon Tetrachloride	25.	U
79-01-6-----	Trichloroethene	25.	U
71-43-2-----	Benzene	25.	U
127-18-4-----	Tetrachloroethene	25.	U
108-90-7-----	Chlorobenzene	25.	U
108-88-3-----	Toluene	25.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ENSECO-WADSWORTH/ALERT

Contract:-

ER-01

Lab Code: WADS

Case No.:

SAS No.:

SDG No.: 19179

Matrix: (soil/water) WATER

Lab Sample ID: B8694111

Sample wt/vol: 5.00 (g/ml) ML

Lab File ID: VOL6858

Level: (low/med) LOW

Date Received: 6/20/93

% Moisture: not dec.

Date Analyzed: 2/22/93

GC Column: DB624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: 0

(uL)

Soil Aliquot Volume: 0 (uL)

CAS NO.

COMPOUND

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

75-01-4-----	Vinyl Chloride	10.	U
75-35-4-----	1,1-Dichloroethene	5.	U
67-66-3-----	Chloroform	5.	U
107-06-2-----	1,2-Dichloroethane	5.	U
78-93-3-----	2-Butanone	50.	U
56-23-5-----	Carbon Tetrachloride	5.	U
79-01-6-----	Trichloroethene	5.	U
71-43-2-----	Benzene	5.	U
127-18-4-----	Tetrachloroethene	5.	U
108-90-7-----	Chlorobenzene	5.	U
108-88-3-----	Toluene	5.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-04

.o Name:ENSECO-WADSWORTH/ALERT Contract:-

Lab Code:WADS Case No.: SAS No.: SDG No.:19179

Matrix: (soil/water) WATER Lab Sample ID:B8695101

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: VOL6849

Level: (low/med) LOW Date Received: 2/20/93

% Moisture: not dec. Date Analyzed: 2/22/93

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/L Q

75-01-4-----	Vinyl Chloride	10.	U
75-35-4-----	1,1-Dichloroethene	5.	U
67-66-3-----	Chloroform	5.	U
107-06-2-----	1,2-Dichloroethane	5.	U
78-93-3-----	2-Butanone	50.	U
56-23-5-----	Carbon Tetrachloride	5.	U
79-01-6-----	Trichloroethene	5.	U
71-43-2-----	Benzene	5.	U
127-18-4-----	Tetrachloroethene	5.	U
108-90-7-----	Chlorobenzene	5.	U
108-88-3-----	Toluene	5.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Sub Name: ENSECO-WADSWORTH/ALERT Contract:-

1620-01

Lab Code: WADS Case No.: SAS No.: SDG No.: 19179

Matrix: (soil/water) WATER Lab Sample ID: B8688109

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: VOL6835

Level: (low/med) LOW Date Received: 2/20/93

% Moisture: not dec. Date Analyzed: 2/21/93

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 5^{1.0}Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL) 2/22/93
JL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/L	Q
75-01-4-----	Vinyl Chloride	50 ^{10.}	U	
75-35-4-----	1,1-Dichloroethene	25.	U	
67-66-3-----	Chloroform	25.	U	
107-06-2-----	1,2-Dichloroethane	25.	U	
78-93-3-----	2-Butanone	250.	U	
56-23-5-----	Carbon Tetrachloride	25.	U	
79-01-6-----	Trichloroethene	25.	U	
71-43-2-----	Benzene	25.	U	
127-18-4-----	Tetrachloroethene	25.	U	
108-90-7-----	Chlorobenzene	25.	U	
108-88-3-----	Toluene	25.	U	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name:ENSECO-WADSWORTH/ALERT Contract:-

1620-02

Lab Code:WADS Case No.: SAS No.: SDG No.:19179

Matrix: (soil/water) WATER Lab Sample ID:B8689109

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: VOL6853

Level: (low/med) LOW Date Received: 6/20/93

% Moisture: not dec. Date Analyzed: 2/22/93

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4-----	Vinyl Chloride	50.	U
75-35-4-----	1,1-Dichloroethene	25.	U
67-66-3-----	Chloroform	25.	U
107-06-2-----	1,2-Dichloroethane	25.	U
78-93-3-----	2-Butanone	250.	U
56-23-5-----	Carbon Tetrachloride	25.	U
79-01-6-----	Trichloroethene	25.	U
71-43-2-----	Benzene	25.	U
127-18-4-----	Tetrachloroethene	25.	U
108-90-7-----	Chlorobenzene	25.	U
108-88-3-----	Toluene	25.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ENSECO-WADSWORTH/ALERT

Contract:-

1620-03

Lab Code: WADS

Case No.:

SAS No.:

SDG No.: 19179

Matrix: (soil/water) WATER

Lab Sample ID: B8690109

Sample wt/vol: 5.00 (g/ml) ML

Lab File ID: VOL6854

Level: (low/med) LOW

Date Received: 6/20/93

% Moisture: not dec.

Date Analyzed: 2/22/93

GC Column: DB624 ID: 0.53 (mm)

Dilution Factor: 5.0

Soil Extract Volume: 0

(uL)

Soil Aliquot Volume: 0 (uL)

CAS NO.

COMPOUND

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

75-01-4-----	Vinyl Chloride	50.	U
75-35-4-----	1,1-Dichloroethene	25.	U
67-66-3-----	Chloroform	25.	U
107-06-2-----	1,2-Dichloroethane	25.	U
78-93-3-----	2-Butanone	250.	U
56-23-5-----	Carbon Tetrachloride	25.	U
79-01-6-----	Trichloroethene	25.	U
71-43-2-----	Benzene	25.	U
127-18-4-----	Tetrachloroethene	25.	U
108-90-7-----	Chlorobenzene	25.	U
108-88-3-----	Toluene	25.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1620-04

Lab Name: ENSECO-WADSWORTH/ALERT Contract:-

Lab Code: WADS Case No.: SAS No.: SDG No.: 19179

Matrix: (soil/water) WATER Lab Sample ID: B8692109

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: VOL6846

Level: (low/med) LOW Date Received: 2/20/93

% Moisture: not dec. Date Analyzed: 2/22/93

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 5.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
---------	----------	--	---

75-01-4-----	Vinyl Chloride	50.	U
75-35-4-----	1,1-Dichloroethene	25.	U
67-66-3-----	Chloroform	25.	U
107-06-2-----	1,2-Dichloroethane	25.	U
78-93-3-----	2-Butanone	250.	U
56-23-5-----	Carbon Tetrachloride	25.	U
79-01-6-----	Trichloroethene	25.	U
71-43-2-----	Benzene	25.	U
127-18-4-----	Tetrachloroethene	25.	U
108-90-7-----	Chlorobenzene	25.	U
108-88-3-----	Toluene	25.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name:ENSECO-WADSWORTH/ALERT

Contract:-

1620-05

Lab Code:WADS

Case No.:

SAS No.:

SDG No.:19179

Matrix: (soil/water) WATER

Lab Sample ID:B8693109

Sample wt/vol: 5.00 (g/ml) ML

Lab File ID: VOL6847

Level: (low/med) LOW

Date Received: 2/20/93

% Moisture: not dec.

Date Analyzed: 2/22/93

GC Column:DB624 ID: 0.53 (mm)

Dilution Factor: 5.0

Soil Extract Volume:0

(uL)

Soil Aliquot Volume:0 (uL)

CAS NO.

COMPOUND

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L

Q

75-01-4-----	Vinyl Chloride	50.	U
75-35-4-----	1,1-Dichloroethene	25.	U
67-66-3-----	Chloroform	25.	U
107-06-2-----	1,2-Dichloroethane	25.	U
78-93-3-----	2-Butanone	250.	U
56-23-5-----	Carbon Tetrachloride	25.	U
79-01-6-----	Trichloroethene	25.	U
71-43-2-----	Benzene	25.	U
127-18-4-----	Tetrachloroethene	25.	U
108-90-7-----	Chlorobenzene	25.	U
108-88-3-----	Toluene	25.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB-01

Lab Name: ENSECO-WADSWORTH/ALERT Contract:-

Lab Code: WADS Case No.: SAS No.: SDG No.: 19179

Matrix: (soil/water) WATER Lab Sample ID: B8685111

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: VOL6857

Level: (low/med) LOW Date Received: 6/20/93

% Moisture: not dec. Date Analyzed: 2/22/93

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4-----	Vinyl Chloride	10.	U
75-35-4-----	1,1-Dichloroethene	5.	U
67-66-3-----	Chloroform	5.	U
107-06-2-----	1,2-Dichloroethane	5.	U
78-93-3-----	2-Butanone	50.	U
56-23-5-----	Carbon Tetrachloride	5.	U
79-01-6-----	Trichloroethene	5.	U
71-43-2-----	Benzene	5.	U
127-18-4-----	Tetrachloroethene	5.	U
108-90-7-----	Chlorobenzene	5.	U
108-88-3-----	Toluene	5.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name:ENSECO-WADSWORTH/ALERT

Contract:-

TB-03

Lab Code:WADS

Case No.:

SAS No.:

SDG No.:19179

Matrix: (soil/water) WATER

Lab Sample ID:B8686101

Sample wt/vol: 5.00 (g/ml) ML

Lab File ID: VOL6833

Level: (low/med) LOW

Date Received: 2/20/93

% Moisture: not dec.

Date Analyzed: 2/21/93

GC Column:DB624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
75-01-4-----	Vinyl Chloride	10.	U
75-35-4-----	1,1-Dichloroethene	5.	U
67-66-3-----	Chloroform	5.	U
107-06-2-----	1,2-Dichloroethane	5.	U
78-93-3-----	2-Butanone	50.	U
56-23-5-----	Carbon Tetrachloride	5.	U
79-01-6-----	Trichloroethene	5.	U
71-43-2-----	Benzene	5.	U
127-18-4-----	Tetrachloroethene	5.	U
108-90-7-----	Chlorobenzene	5.	U
108-88-3-----	Toluene	5.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ENSECO-WADSWORTH/ALERT Contract:-

TB-05

Lab Code: WADS Case No.: SAS No.: SDG No.: 19179

Matrix: (soil/water) WATER Lab Sample ID: B8700101

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: VOL6832

Level: (low/med) LOW Date Received: 2/20/93

% Moisture: not dec. Date Analyzed: 2/21/93

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	10.	U
75-01-4-----	Vinyl Chloride	10.	U
75-35-4-----	1,1-Dichloroethene	5.	U
67-66-3-----	Chloroform	5.	U
107-06-2-----	1,2-Dichloroethane	5.	U
78-93-3-----	2-Butanone	50.	U
56-23-5-----	Carbon Tetrachloride	5.	U
79-01-6-----	Trichloroethene	5.	U
71-43-2-----	Benzene	5.	U
127-18-4-----	Tetrachloroethene	5.	U
108-90-7-----	Chlorobenzene	5.	U
108-88-3-----	Toluene	5.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-08

Lab Name: ENSECO-WADSWORTH/ALERT Contract:-

Lab Code: WADS Case No.: SAS No.: SDG No.: 19179

Matrix: (soil/water) WATER Lab Sample ID: B8702101

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: VOL6855

Level: (low/med) LOW Date Received: 6/20/93

% Moisture: not dec. Date Analyzed: 2/22/93

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 0 (uL) Soil Aliquot Volume: 0 (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

75-01-4-----	Vinyl Chloride	10.	U
75-35-4-----	1,1-Dichloroethene	5.	U
67-66-3-----	Chloroform	5.	U
107-06-2-----	1,2-Dichloroethane	5.	U
78-93-3-----	2-Butanone	50.	U
56-23-5-----	Carbon Tetrachloride	5.	U
79-01-6-----	Trichloroethene	5.	U
71-43-2-----	Benzene	5.	U
127-18-4-----	Tetrachloroethene	5.	U
108-90-7-----	Chlorobenzene	5.	U
108-88-3-----	Toluene	5.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name:ENSECO-WADSWORTH/ALERT

Contract:-

TB-06

Lab Code:WADS	Case No.:	SAS No.:	SDG No.:19179
Matrix: (soil/water) WATER		Lab Sample ID:B8703101	
Sample wt/vol: 5.00 (g/ml) ML		Lab File ID: VOL6856	
Level: (low/med) LOW		Date Received: 6/20/93	
% Moisture: not dec.		Date Analyzed: 2/22/93	
GC Column:DB624	ID: 0.53 (mm)	Dilution Factor:	1.0
Soil Extract Volume:0 (uL)		Soil Aliquot Volume:0 (uL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Q	
		UG/L	Q
75-01-4-----	Vinyl Chloride	10.	U
75-35-4-----	1,1-Dichloroethene	5.	U
67-66-3-----	Chloroform	5.	U
107-06-2-----	1,2-Dichloroethane	5.	U
78-93-3-----	2-Butanone	50.	U
56-23-5-----	Carbon Tetrachloride	5.	U
79-01-6-----	Trichloroethene	5.	U
71-43-2-----	Benzene	5.	U
127-18-4-----	Tetrachloroethene	5.	U
108-90-7-----	Chlorobenzene	5.	U
108-88-3-----	Toluene	5.	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name:ENSECO-WADSWORTH/ALERT Contract:-

TB-07

Lab Code:WADS Case No.: SAS No.: SDG No.:19179

Matrix: (soil/water) WATER Lab Sample ID:B8687101

Sample wt/vol: 5.00 (g/ml) ML Lab File ID: VOL6834

Level: (low/med) LOW Date Received: 2/20/93

% Moisture: not dec. Date Analyzed: 2/21/93

GC Column:DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume:0 (uL) Soil Aliquot Volume:0 (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg) UG/L	Q
75-01-4-----	Vinyl Chloride	10.	U
75-35-4-----	1,1-Dichloroethene	5.	U
67-66-3-----	Chloroform	5.	U
107-06-2-----	1,2-Dichloroethane	5.	U
78-93-3-----	2-Butanone	50.	U
56-23-5-----	Carbon Tetrachloride	5.	U
79-01-6-----	Trichloroethene	5.	U
71-43-2-----	Benzene	5.	U
127-18-4-----	Tetrachloroethene	5.	U
108-90-7-----	Chlorobenzene	5.	U
108-88-3-----	Toluene	5.	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

b Name: ENSECO-WADSWORTH/ALERT Contract: 68-D1-0085

3
1/2-01

Lab Code: WADS Case No.: SAS No.: SDG No.: BAKER

Matrix: (soil/water) WATER Lab Sample ID: B8516112

Sample wt/vol: 250.00 (g/ml) ML Lab File ID: B8516112

Level: (low/med) LOW Date Received: 2/19/93

% Moisture: 0 decanted: (Y/N) N Date Extracted: 2/20/93

Concentrated Extract Volume: 250.00 (uL) Date Analyzed: 2/21/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 0.0

CONCENTRATION UNITS:
(mg/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
106-46-7-----	1,4-Dichlorobenzene	0.04	U
95-48-7-----	2-Methylphenol	0.04	U
106-44-5-----	4-Methylphenol	0.04	U
-----	Cresols, Total	0.04	U
67-72-1-----	Hexachloroethane	0.04	U
98-95-3-----	Nitrobenzene	0.04	U
87-68-3-----	Hexachlorobutadiene	0.04	U
88-06-2-----	2,4,6-Trichlorophenol	0.04	U
95-95-4-----	2,4,5-Trichlorophenol	0.04	U
121-14-2-----	2,4-Dinitrotoluene	0.04	U
118-74-1-----	Hexachlorobenzene	0.04	U
87-86-5-----	Pentachlorophenol	0.2	U
110-86-1-----	Pyridine	0.04	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13-02

Name: ENSECO-WADSWORTH/ALERT Contract: 68-D1-0085
Lab Code: WADS Case No.: SAS No.: SDG No.: BAKER
Matrix: (soil/water) WATER Lab Sample ID: B8523112
Sample wt/vol: 250.00 (g/ml) ML Lab File ID: B8523112
Level: (low/med) LOW Date Received: 2/19/93
% Moisture: 0 decanted: (Y/N) N Date Extracted: 2/20/93
Concentrated Extract Volume: 250.00 (uL) Date Analyzed: 2/21/93
Injection Volume: 1.00 (uL) Dilution Factor: 1.00
GPC Cleanup: (Y/N) N pH: 0.0

CAS NO. COMPOUND CONCENTRATION UNITS:
(mg/L or ug/Kg) UG/L Q

106-46-7-----	1,4-Dichlorobenzene	0.04	U
95-48-7-----	2-Methylphenol	0.04	U
106-44-5-----	4-Methylphenol	0.04	U
	Cresols, Total	0.04	U
67-72-1-----	Hexachloroethane	0.04	U
98-95-3-----	Nitrobenzene	0.04	U
87-68-3-----	Hexachlorobutadiene	0.04	U
88-06-2-----	2,4,6-Trichlorophenol	0.04	U
95-95-4-----	2,4,5-Trichlorophenol	0.04	U
121-14-2-----	2,4-Dinitrotoluene	0.04	U
118-74-1-----	Hexachlorobenzene	0.04	U
87-86-5-----	Pentachlorophenol	0.2	U
110-86-1-----	Pyridine	0.04	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

o Name: ENSECO-WADSWORTH/ALERT Contract: 68-D1-0085

1620-01

Lab Code: WADS Case No.: SAS No.: SDG No.: BAKER

Matrix: (soil/water) WATER Lab Sample ID: B8688110

Sample wt/vol: 250.00 (g/ml) ML Lab File ID: B8688110

Level: (low/med) LOW Date Received: 2/20/93

% Moisture: 0 decanted: (Y/N) N Date Extracted: 2/21/93

Concentrated Extract Volume: 250.00 (uL) Date Analyzed: 2/21/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 0.0

CAS NO. COMPOUND CONCENTRATION UNITS:
(mg/L or ug/Kg) UG/L Q

106-46-7-----	1,4-Dichlorobenzene	0.04	U
95-48-7-----	2-Methylphenol	0.04	U
106-44-5-----	4-Methylphenol	0.04	U
-----	Cresols, Total	0.04	U
67-72-1-----	Hexachloroethane	0.04	U
98-95-3-----	Nitrobenzene	0.04	U
87-68-3-----	Hexachlorobutadiene	0.04	U
88-06-2-----	2,4,6-Trichlorophenol	0.04	U
95-95-4-----	2,4,5-Trichlorophenol	0.04	U
121-14-2-----	2,4-Dinitrotoluene	0.04	U
118-74-1-----	Hexachlorobenzene	0.04	U
87-86-5-----	Pentachlorophenol	0.2	U
110-86-1-----	Pyridine	0.04	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ENSECO-WADSWORTH/ALERT

Contract: 68-D1-0085

1620-02

Lab Code: WADS Case No.:

SAS No.:

SDG No.: BAKER

Matrix: (soil/water) WATER

Lab Sample ID: B8689110

Sample wt/vol: 250.00 (g/ml) ML

Lab File ID: B8689110

Level: (low/med) LOW

Date Received: 2/20/93

% Moisture: 0 decanted: (Y/N) N

Date Extracted: 2/21/93

Concentrated Extract Volume: 250.00 (uL)

Date Analyzed: 2/21/93

Injection Volume: 1.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 0.0

CONCENTRATION UNITS:

(mg/L or ug/Kg) UG/L

Q

CAS NO.	COMPOUND		
106-46-7-----	1, 4-Dichlorobenzene	0.04	U
95-48-7-----	2-Methylphenol	0.04	U
106-44-5-----	4-Methylphenol	0.04	U
-----	Cresols, Total	0.04	U
67-72-1-----	Hexachloroethane	0.04	U
98-95-3-----	Nitrobenzene	0.04	U
87-68-3-----	Hexachlorobutadiene	0.04	U
88-06-2-----	2, 4, 6-Trichlorophenol	0.04	U
95-95-4-----	2, 4, 5-Trichlorophenol	0.04	U
121-14-2-----	2, 4-Dinitrotoluene	0.04	U
118-74-1-----	Hexachlorobenzene	0.04	U
87-86-5-----	Pentachlorophenol	0.2	U
110-86-1-----	Pyridine	0.04	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

o Name:ENSECO-WADSWORTH/ALERT

Contract:68-D1-0085

1620-03

Lab Code:WADS Case No.:

SAS No.:

SDG No.:BAKER

Matrix: (soil/water) WATER

Lab Sample ID:B8690110

Sample wt/vol: 250.00 (g/ml) ML

Lab File ID: B8690110

Level: (low/med) LOW

Date Received: 2/20/93

% Moisture: 0 decanted: (Y/N) N

Date Extracted: 2/21/93

Concentrated Extract Volume: 250.00 (uL)

Date Analyzed: 2/21/93

Injection Volume: 1.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 0.0

CONCENTRATION UNITS:
(mg/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
106-46-7-----	1,4-Dichlorobenzene	0.04	U
95-48-7-----	2-Methylphenol	0.04	U
106-44-5-----	4-Methylphenol	0.04	U
-----	Cresols, Total	0.04	U
67-72-1-----	Hexachloroethane	0.04	U
98-95-3-----	Nitrobenzene	0.04	U
87-68-3-----	Hexachlorobutadiene	0.04	U
88-06-2-----	2,4,6-Trichlorophenol	0.04	U
95-95-4-----	2,4,5-Trichlorophenol	0.04	U
121-14-2-----	2,4-Dinitrotoluene	0.04	U
118-74-1-----	Hexachlorobenzene	0.04	U
87-86-5-----	Pentachlorophenol	0.2	U
110-86-1-----	Pyridine	0.04	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Name:ENSECO-WADSWORTH/ALERT Contract:68-D1-0085

1620-04

Lab Code:WADS Case No.: SAS No.: SDG No.:BAKER
Matrix: (soil/water) WATER Lab Sample ID:B8692110
Sample wt/vol: 250.00 (g/ml) ML Lab File ID: B8692110
Level: (low/med) LOW Date Received: 2/20/93
% Moisture: 0 decanted: (Y/N) N Date Extracted: 2/21/93
Concentrated Extract Volume: 250.00 (uL) Date Analyzed: 2/21/93
Injection Volume: 1.00 (uL) Dilution Factor: 1.00
GPC Cleanup: (Y/N) N pH: 0.0

CAS NO. COMPOUND CONCENTRATION UNITS:
(mg/L or ug/Kg) UG/L Q

106-46-7-----	1,4-Dichlorobenzene	0.04	U
95-48-7-----	2-Methylphenol	0.04	U
106-44-5-----	4-Methylphenol	0.04	U
-----	Cresols, Total	0.04	U
67-72-1-----	Hexachloroethane	0.04	U
98-95-3-----	Nitrobenzene	0.04	U
87-68-3-----	Hexachlorobutadiene	0.04	U
88-06-2-----	2,4,6-Trichlorophenol	0.04	U
95-95-4-----	2,4,5-Trichlorophenol	0.04	U
121-14-2-----	2,4-Dinitrotoluene	0.04	U
118-74-1-----	Hexachlorobenzene	0.04	U
87-86-5-----	Pentachlorophenol	0.2	U
110-86-1-----	Pyridine	0.04	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

1620-05

✓ Name: ENSECO-WADSWORTH/ALERT Contract: 68-D1-0085

Lab Code: WADS Case No.: SAS No.: SDG No.: BAKER

Matrix: (soil/water) WATER Lab Sample ID: B8693110R

Sample wt/vol: 250.00 (g/ml) ML Lab File ID: B8693110R

Level: (low/med) LOW Date Received: 2/20/93

% Moisture: 0 decanted: (Y/N) N Date Extracted: 2/21/93

Concentrated Extract Volume: 250.00 (uL) Date Analyzed: 2/22/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 0.0

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(mg/L or ug/Kg)	UG/L Q
106-46-7-----	1,4-Dichlorobenzene	0.04	U
95-48-7-----	2-Methylphenol	0.04	U
106-44-5-----	4-Methylphenol	0.04	U
-----	Cresols, Total	0.04	U
67-72-1-----	Hexachloroethane	0.04	U
98-95-3-----	Nitrobenzene	0.04	U
87-68-3-----	Hexachlorobutadiene	0.04	U
88-06-2-----	2,4,6-Trichlorophenol	0.04	U
95-95-4-----	2,4,5-Trichlorophenol	0.04	U
121-14-2-----	2,4-Dinitrotoluene	0.04	U
118-74-1-----	Hexachlorobenzene	0.04	U
87-86-5-----	Pentachlorophenol	0.2	U
110-86-1-----	Pyridine	0.04	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ENSECO-WADSWORTH/ALERT

Contract: 68-D1-0085

ER-01

Lab Code: WADS Case No.:

SAS No.:

SDG No.: BAKER

Matrix: (soil/water) WATER

Lab Sample ID: B8694112

Sample wt/vol: 250.00 (g/ml) ML

Lab File ID: B8694112

Level: (low/med) LOW

Date Received: 2/20/93

% Moisture: 0 decanted: (Y/N) N

Date Extracted: 2/21/93

Concentrated Extract Volume: 250.00 (uL)

Date Analyzed: 2/21/93

Injection Volume: 1.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 0.0

CONCENTRATION UNITS:

(mg/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND		
106-46-7-----	1,4-Dichlorobenzene	0.04	U
95-48-7-----	2-Methylphenol	0.04	U
106-44-5-----	4-Methylphenol	0.04	U
-----	Cresols, Total	0.04	U
67-72-1-----	Hexachloroethane	0.04	U
98-95-3-----	Nitrobenzene	0.04	U
87-68-3-----	Hexachlorobutadiene	0.04	U
88-06-2-----	2,4,6-Trichlorophenol	0.04	U
95-95-4-----	2,4,5-Trichlorophenol	0.04	U
121-14-2-----	2,4-Dinitrotoluene	0.04	U
118-74-1-----	Hexachlorobenzene	0.04	U
87-86-5-----	Pentachlorophenol	0.2	U
110-86-1-----	Pyridine	0.04	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name:ENSECO-WADSWORTH/ALERT Contract:68-D1-0085

1620-06

Lab Code:WADS Case No.: SAS No.: SDG No.:BAKER

Matrix: (soil/water) WATER Lab Sample ID:B8698110

Sample wt/vol: 250.00 (g/ml) ML Lab File ID: B8698110

Level: (low/med) LOW Date Received: 2/20/93

% Moisture: 0 decanted: (Y/N) N Date Extracted: 2/21/93

Concentrated Extract Volume: 250.00 (uL) Date Analyzed: 2/21/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 0.0

CONCENTRATION UNITS:
(mg/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
106-46-7-----	1,4-Dichlorobenzene	0.04	U
95-48-7-----	2-Methylphenol	0.04	U
106-44-5-----	4-Methylphenol	0.04	U
-----	Cresols, Total	0.04	U
67-72-1-----	Hexachloroethane	0.04	U
98-95-3-----	Nitrobenzene	0.04	U
87-68-3-----	Hexachlorobutadiene	0.04	U
88-06-2-----	2,4,6-Trichlorophenol	0.04	U
95-95-4-----	2,4,5-Trichlorophenol	0.04	U
121-14-2-----	2,4-Dinitrotoluene	0.04	U
118-74-1-----	Hexachlorobenzene	0.04	U
87-86-5-----	Pentachlorophenol	0.2	U
110-86-1-----	Pyridine	0.04	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ENSECO-WADSWORTH/ALERT Contract: 68-D1-0085

1620-07

Lab Code: WADS	Case No.:	SAS No.:	SDG No.: BAKER
Matrix: (soil/water) WATER		Lab Sample ID: B8697110	
Sample wt/vol: 250.00 (g/ml) ML		Lab File ID: B8697110	
Level: (low/med) LOW		Date Received: 2/20/93	
% Moisture: 0 decanted: (Y/N) N		Date Extracted: 2/21/93	
Concentrated Extract Volume: 250.00 (uL)		Date Analyzed: 2/21/93	
Injection Volume: 1.00 (uL)		Dilution Factor: 1.00	
GPC Cleanup: (Y/N) N	pH: 0.0		

CONCENTRATION UNITS:
(mg/L or ug/Kg) UG/L Q

106-46-7-----1,4-Dichlorobenzene	0.04	U
95-48-7-----2-Methylphenol	0.04	U
106-44-5-----4-Methylphenol	0.04	U
-----Cresols, Total	0.04	U
67-72-1-----Hexachloroethane	0.04	U
98-95-3-----Nitrobenzene	0.04	U
87-68-3-----Hexachlorobutadiene	0.04	U
88-06-2-----2,4,6-Trichlorophenol	0.04	U
95-95-4-----2,4,5-Trichlorophenol	0.04	U
121-14-2-----2,4-Dinitrotoluene	0.04	U
118-74-1-----Hexachlorobenzene	0.04	U
87-86-5-----Pentachlorophenol	0.2	U
110-86-1-----Pyridine	0.04	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ENSECO-WADSWORTH/ALERT Contract: 68-D1-0085

DP-01

Lab Code: WADS Case No.: SAS No.: SDG No.: BAKER

Matrix: (soil/water) WATER Lab Sample ID: B8345118

Sample wt/vol: 250.00 (g/ml) ML Lab File ID: B8345118

Level: (low/med) LOW Date Received: 2/18/93

% Moisture: 0 decanted: (Y/N) N Date Extracted: 2/19/93

Concentrated Extract Volume: 250.00 (uL) Date Analyzed: 2/19/93

Injection Volume: 1.00 (uL) Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 0.0

CONCENTRATION UNITS:
(mg/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
106-46-7-----	1,4-Dichlorobenzene	0.04	U
95-48-7-----	2-Methylphenol	0.04	U
106-44-5-----	4-Methylphenol	0.04	U
-----	Cresols, Total	0.04	U
67-72-1-----	Hexachloroethane	0.04	U
98-95-3-----	Nitrobenzene	0.04	U
87-68-3-----	Hexachlorobutadiene	0.04	U
88-06-2-----	2,4,6-Trichlorophenol	0.04	U
95-95-4-----	2,4,5-Trichlorophenol	0.04	U
121-14-2-----	2,4-Dinitrotoluene	0.04	U
118-74-1-----	Hexachlorobenzene	0.04	U
87-86-5-----	Pentachlorophenol	0.2	U
110-86-1-----	Pyridine	0.04	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Name:ENSECO-WADSWORTH/ALERT

Contract:68-D1-0085

DP-02

Lab Code:WADS Case No.:

SAS No.:

SDG No.:BAKER

Matrix: (soil/water) WATER

Lab Sample ID:B8348111

Sample wt/vol: 250.00 (g/ml) ML

Lab File ID: B8348111

Level: (low/med) LOW

Date Received: 2/18/93

% Moisture: 0 decanted: (Y/N) N

Date Extracted: 2/19/93

Concentrated Extract Volume: 250.00 (uL)

Date Analyzed: 2/19/93

Injection Volume: 1.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 0.0

CONCENTRATION UNITS:

(mg/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
106-46-7-----	1,4-Dichlorobenzene	0.04	U
95-48-7-----	2-Methylphenol	0.04	U
106-44-5-----	4-Methylphenol	0.04	U
-----	Cresols, Total	0.04	U
67-72-1-----	Hexachloroethane	0.04	U
98-95-3-----	Nitrobenzene	0.04	U
87-68-3-----	Hexachlorobutadiene	0.04	U
88-06-2-----	2,4,6-Trichlorophenol	0.04	U
95-95-4-----	2,4,5-Trichlorophenol	0.04	U
121-14-2-----	2,4-Dinitrotoluene	0.04	U
118-74-1-----	Hexachlorobenzene	0.04	U
87-86-5-----	Pentachlorophenol	0.2	U
110-86-1-----	Pyridine	0.04	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name:ENSECO-WADSWORTH/ALERT

Contract:68-D1-0085

FB-01

Lab Code:WADS Case No.:

SAS No.:

SDG No.:BAKER

Matrix: (soil/water) WATER

Lab Sample ID:B8685112

Sample wt/vol: 250.00 (g/ml) ML

Lab File ID: B8685112

Level: (low/med) LOW

Date Received: 2/20/93

% Moisture: 0 decanted: (Y/N) N

Date Extracted: 2/21/93

Concentrated Extract Volume: 250.00 (uL)

Date Analyzed: 2/21/93

Injection Volume: 1.00 (uL)

Dilution Factor: 1.00

GPC Cleanup: (Y/N) N pH: 0.0

CONCENTRATION UNITS:
(mg/L or ug/Kg) UG/L Q

CAS NO.	COMPOUND	UG/L	Q
106-46-7-----	1,4-Dichlorobenzene	0.04	U
95-48-7-----	2-Methylphenol	0.04	U
106-44-5-----	4-Methylphenol	0.04	U
-----	Cresols, Total	0.04	U
67-72-1-----	Hexachloroethane	0.04	U
98-95-3-----	Nitrobenzene	0.04	U
87-68-3-----	Hexachlorobutadiene	0.04	U
88-06-2-----	2,4,6-Trichlorophenol	0.04	U
95-95-4-----	2,4,5-Trichlorophenol	0.04	U
121-14-2-----	2,4-Dinitrotoluene	0.04	U
118-74-1-----	Hexachlorobenzene	0.04	U
87-86-5-----	Pentachlorophenol	0.2	U
110-86-1-----	Pyridine	0.04	U

BAKER ENVIRONMENTAL INC

19179-DP-01 2-17-93 1830

WO #: B8345112

LAB #: A3B180005-001

MATRIX: SOLID

DATE RECEIVED:

2/18/93

TCLP EXTRACTION DATE:

2/19/93

- - - - - REQUESTED PARAMETERS - - - - -

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

<u>PARAMETER</u>	<u>RESULT (mg/L)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
Heptachlor	ND	0.0001	SW846 8080	2/19/93	3050050
Heptachlor epoxide	ND	0.0001	SW846 8080	2/19/93	3050050
Endrin	ND	0.0005	SW846 8080	2/19/93	3050050
Chlordane	ND	0.0005	SW846 8080	2/19/93	3050050
Methoxychlor	ND	0.001	SW846 8080	2/19/93	3050050
Toxaphene	ND	0.005	SW846 8080	2/19/93	3050050
Lindane	ND	0.0001	SW846 8080	2/19/93	3050050

SURROGATE RECOVERY%ACCEPTABLE LIMITS

Dibutylchlorendate	98	(24 - 154)
Tetrachloro-m-xylene	98	(60 - 150)

NOTE: AS RECEIVED

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19179-DP-02 2-17-93 1830

WO #: B8348110

LAB #: A3B180005-002

MATRIX: SOLID

DATE RECEIVED:

2/18/93

TCLP EXTRACTION DATE:

2/19/93

- - - - - REQUESTED PARAMETERS - - - - -

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

<u>PARAMETER</u>	<u>RESULT (mg/L)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
Heptachlor	ND	0.0001	SW846 8080	2/19/93	3050050
Heptachlor epoxide	ND	0.0001	SW846 8080	2/19/93	3050050
Endrin	ND	0.0005	SW846 8080	2/19/93	3050050
Chlordane	ND	0.0005	SW846 8080	2/19/93	3050050
Methoxychlor	ND	0.001	SW846 8080	2/19/93	3050050
Toxaphene	ND	0.005	SW846 8080	2/19/93	3050050
Lindane	ND	0.0001	SW846 8080	2/19/93	3050050

<u>SURROGATE RECOVERY</u>	<u>%</u>	<u>ACCEPTABLE LIMITS</u>
Dibutylchlorendate	88	(24 - 154)
Tetrachloro-m-xylene	85	(60 - 150)

NOTE: AS RECEIVED

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19179-13-01 2-18-93 1200

WO #: B8516110

LAB #: A3B190006-002

MATRIX: SOLID

DATE RECEIVED:

2/19/93

TCLP EXTRACTION DATE:

2/20/93

- - - - - REQUESTED PARAMETERS - - - - -

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

<u>PARAMETER</u>	<u>RESULT (mg/L)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
Heptachlor	ND	0.0001	SW846 8080	2/20- 2/21/93	3051003
Heptachlor epoxide	ND	0.0001	SW846 8080	2/20- 2/21/93	3051003
Endrin	ND	0.0005	SW846 8080	2/20- 2/21/93	3051003
Chlordane	ND	0.0005	SW846 8080	2/20- 2/21/93	3051003
Methoxychlor	ND	0.001	SW846 8080	2/20- 2/21/93	3051003
Toxaphene	ND	0.005	SW846 8080	2/20- 2/21/93	3051003
Lindane	ND	0.0001	SW846 8080	2/20- 2/21/93	3051003

SURROGATE RECOVERY%ACCEPTABLE LIMITS

Dibutylchlorendate	94	(24 - 154)
Tetrachloro-m-xylene	91	(60 - 150)

NOTE: AS RECEIVED

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19179-13-02 2-18-93 1200

WO #: B8523110

LAB #: A3B190006-004

MATRIX: SOLID

DATE RECEIVED:

2/19/93

TCLP EXTRACTION DATE:

2/20/93

- - - - - REQUESTED PARAMETERS - - - - -

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

<u>PARAMETER</u>	<u>RESULT (mg/L)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
Heptachlor	ND	0.0001	SW846 8080	2/20- 2/21/93	3051003
Heptachlor epoxide	ND	0.0001	SW846 8080	2/20- 2/21/93	3051003
Endrin	ND	0.0005	SW846 8080	2/20- 2/21/93	3051003
Chlordane	ND	0.0005	SW846 8080	2/20- 2/21/93	3051003
Methoxychlor	ND	0.001	SW846 8080	2/20- 2/21/93	3051003
Toxaphene	ND	0.005	SW846 8080	2/20- 2/21/93	3051003
Lindane	ND	0.0001	SW846 8080	2/20- 2/21/93	3051003

SURROGATE RECOVERY

%

ACCEPTABLE LIMITS

Dibutylchlorendate	99	(24 - 154)
Tetrachloro-m-xylene	93	(60 - 150)

NOTE: AS RECEIVED

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19197-1620-01 2-18-93 1615

WO #: B8688111
 LAB #: A3B200001-004
 MATRIX: SOLID

DATE RECEIVED: 2/20/93
 TCLP EXTRACTION DATE: 2/21/93

- - - - - REQUESTED PARAMETERS - - - - -

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

<u>PARAMETER</u>	<u>RESULT (mg/L)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
Heptachlor	ND	0.0001	SW846 8080	2/21/93	3052005
Heptachlor epoxide	ND	0.0001	SW846 8080	2/21/93	3052005
Endrin	ND	0.0005	SW846 8080	2/21/93	3052005
Chlordane	ND	0.0005	SW846 8080	2/21/93	3052005
Methoxychlor	ND	0.001	SW846 8080	2/21/93	3052005
Toxaphene	ND	0.005	SW846 8080	2/21/93	3052005
Lindane	ND	0.0001	SW846 8080	2/21/93	3052005

SURROGATE RECOVERY

%

ACCEPTABLE LIMITS

Dibutylchlorendate	97	(24 - 154)
Tetrachloro-m-xylene	80	(60 - 150)

NOTE: AS RECEIVED

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19197-1620-02 2-19-93 0900

WO #: B8689111

LAB #: A3B200001-005

MATRIX: SOLID

DATE RECEIVED:

2/20/93

TCLP EXTRACTION DATE:

2/21/93

- - - - - REQUESTED PARAMETERS - - - - -

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

<u>PARAMETER</u>	<u>RESULT (mg/L)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
Heptachlor	ND	0.0001	SW846 8080	2/21/93	3052005
Heptachlor epoxide	ND	0.0001	SW846 8080	2/21/93	3052005
Endrin	ND	0.0005	SW846 8080	2/21/93	3052005
Chlordane	ND	0.0005	SW846 8080	2/21/93	3052005
Methoxychlor	ND	0.001	SW846 8080	2/21/93	3052005
Toxaphene	ND	0.005	SW846 8080	2/21/93	3052005
Lindane	ND	0.0001	SW846 8080	2/21/93	3052005

SURROGATE RECOVERY%ACCEPTABLE LIMITS

Dibutylchlorendate	92	(24 - 154)
Tetrachloro-m-xylene	85	(60 - 150)

NOTE: AS RECEIVED

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19197-1620-03 2-18-93 1545

WO #: B8690111

LAB #: A3B200001-006

MATRIX: SOLID

DATE RECEIVED:

2/20/93

TCLP EXTRACTION DATE:

2/21/93

- - - - - REQUESTED PARAMETERS - - - - -

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

<u>PARAMETER</u>	<u>RESULT (mg/L)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
Heptachlor	ND	0.0001	SW846 8080	2/21/93	3052005
Heptachlor epoxide	ND	0.0001	SW846 8080	2/21/93	3052005
Endrin	ND	0.0005	SW846 8080	2/21/93	3052005
Chlordane	ND	0.0005	SW846 8080	2/21/93	3052005
Methoxychlor	ND	0.001	SW846 8080	2/21/93	3052005
Toxaphene	ND	0.005	SW846 8080	2/21/93	3052005
Lindane	ND	0.0001	SW846 8080	2/21/93	3052005

SURROGATE RECOVERY

%

ACCEPTABLE LIMITS

Dibutylchlorendate	83	(24 - 154)
Tetrachloro-m-xylene	93	(60 - 150)

NOTE: AS RECEIVED

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19197-1620-04 2-19-93 0930

WO #: B8692113

LAB #: A3B200001-007

MATRIX: SOLID

DATE RECEIVED: 2/20/93

TCLP EXTRACTION DATE: 2/21/93

- - - - - REQUESTED PARAMETERS - - - - -

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

<u>PARAMETER</u>	<u>RESULT (mg/L)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
Heptachlor	ND	0.0001	SW846 8080	2/21/93	3052005
Heptachlor epoxide	ND	0.0001	SW846 8080	2/21/93	3052005
Endrin	ND	0.0005	SW846 8080	2/21/93	3052005
Chlordane	ND	0.0005	SW846 8080	2/21/93	3052005
Methoxychlor	ND	0.001	SW846 8080	2/21/93	3052005
Toxaphene	ND	0.005	SW846 8080	2/21/93	3052005
Lindane	ND	0.0001	SW846 8080	2/21/93	3052005

SURROGATE RECOVERY%ACCEPTABLE LIMITS

Dibutylchlorendate	93	(24 - 154)
Tetrachloro-m-xylene	90	(60 - 150)

NOTE: AS RECEIVED
ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19197-1620-05 2-19-93 1000

WO #: B8693111

LAB #: A3B200001-008

MATRIX: SOLID

DATE RECEIVED:

2/20/93

TCLP EXTRACTION DATE:

2/21/93

- - - - - REQUESTED PARAMETERS - - - - -

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

<u>PARAMETER</u>	<u>RESULT (mg/L)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
Heptachlor	ND	0.0001	SW846 8080	2/21/93	3052005
Heptachlor epoxide	ND	0.0001	SW846 8080	2/21/93	3052005
Endrin	ND	0.0005	SW846 8080	2/21/93	3052005
Chlordane	ND	0.0005	SW846 8080	2/21/93	3052005
Methoxychlor	ND	0.001	SW846 8080	2/21/93	3052005
Toxaphene	ND	0.005	SW846 8080	2/21/93	3052005
Lindane	ND	0.0001	SW846 8080	2/21/93	3052005

SURROGATE RECOVERY%ACCEPTABLE LIMITS

Dibutylchlorendate

91

(24 - 154)

Tetrachloro-m-xylene

85

(60 - 150)

NOTE: AS RECEIVED

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19179-ER-01 2-19-93 1100

WO #: B8694110

LAB #: A3B200001-009

MATRIX: WATER

DATE RECEIVED:

2/20/93

TCLP EXTRACTION DATE:

2/21/93

- - - - - TCLP PESTICIDES - - - - -

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

<u>PARAMETER</u>	<u>RESULT (mg/L)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
Lindane	ND	0.0001	SW846 8080	2/21/93	3052005
Heptachlor	ND	0.0001	SW846 8080	2/21/93	3052005
Heptachlor epoxide	ND	0.0001	SW846 8080	2/21/93	3052005
Endrin	ND	0.0005	SW846 8080	2/21/93	3052005
Chlordane	ND	0.0005	SW846 8080	2/21/93	3052005
Methoxychlor	ND	0.001	SW846 8080	2/21/93	3052005
Toxaphene	ND	0.005	SW846 8080	2/21/93	3052005

SURROGATE RECOVERY

%

ACCEPTABLE LIMITS

Dibutylchlorendate	80	(24 - 154)
Tetrachloro-m-xylene	72	(60 - 150)

NOTE: AS RECEIVED

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19197-1620-06 2-19-93 1200

WO #: B8698111

LAB #: A3B200001-012

MATRIX: SOLID

DATE RECEIVED:

2/20/93

TCLP EXTRACTION DATE:

2/21/93

- - - - - REQUESTED PARAMETERS - - - - -

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

<u>PARAMETER</u>	<u>RESULT (mg/L)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
Heptachlor	ND	0.0001	SW846 8080	2/21- 2/22/93	3052005
Heptachlor epoxide	ND	0.0001	SW846 8080	2/21- 2/22/93	3052005
Endrin	ND	0.0005	SW846 8080	2/21- 2/22/93	3052005
Chlordane	ND	0.0005	SW846 8080	2/21- 2/22/93	3052005
Methoxychlor	ND	0.001	SW846 8080	2/21- 2/22/93	3052005
Toxaphene	ND	0.005	SW846 8080	2/21- 2/22/93	3052005
Lindane	ND	0.0001	SW846 8080	2/21- 2/22/93	3052005

SURROGATE RECOVERY%ACCEPTABLE LIMITS

Dibutylchlorendate	98	(24 - 154)
Tetrachloro-m-xylene	94	(60 - 150)

NOTE: AS RECEIVED

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19197-1620-07 2-19-93 1200

WO #: B8697111

LAB #: A3B200001-011

MATRIX: SOLID

DATE RECEIVED:

2/20/93

TCLP EXTRACTION DATE:

2/21/93

- - - - - REQUESTED PARAMETERS - - - - -

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

<u>PARAMETER</u>	<u>RESULT (mg/L)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
Heptachlor	ND	0.0001	SW846 8080	2/21/93	3052005
Heptachlor epoxide	ND	0.0001	SW846 8080	2/21/93	3052005
Endrin	ND	0.0005	SW846 8080	2/21/93	3052005
Chlordane	ND	0.0005	SW846 8080	2/21/93	3052005
Methoxychlor	ND	0.001	SW846 8080	2/21/93	3052005
Toxaphene	ND	0.005	SW846 8080	2/21/93	3052005
Lindane	ND	0.0001	SW846 8080	2/21/93	3052005

SURROGATE RECOVERY%ACCEPTABLE LIMITS

Dibutylchlorendate	94	(24 - 154)
Tetrachloro-m-xylene	88	(60 - 150)

NOTE: AS RECEIVED

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19179-FB-01 2-19-93 1100

WO #: B8685110

LAB #: A3B200001-001

MATRIX: WATER

DATE RECEIVED:

2/20/93

TCLP EXTRACTION DATE:

2/21/93

- - - - - TCLP PESTICIDES - - - - -

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

<u>PARAMETER</u>	<u>RESULT (mg/L)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
Lindane	ND	0.0001	SW846 8080	2/21/93	3052005
Heptachlor	ND	0.0001	SW846 8080	2/21/93	3052005
Heptachlor epoxide	ND	0.0001	SW846 8080	2/21/93	3052005
Endrin	ND	0.0005	SW846 8080	2/21/93	3052005
Chlordane	ND	0.0005	SW846 8080	2/21/93	3052005
Methoxychlor	ND	0.001	SW846 8080	2/21/93	3052005
Toxaphene	ND	0.005	SW846 8080	2/21/93	3052005

SURROGATE RECOVERY

%

ACCEPTABLE LIMITS

Dibutylchlorendate	76	(24 - 154)
Tetrachloro-m-xylene	75	(60 - 150)

NOTE: AS RECEIVED

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19179-DP-01 2-17-93 1830

WO #: B8345109

LAB #: A3B180005-001

MATRIX: SOLID

DATE RECEIVED:

2/18/93

TCLP EXTRACTION DATE:

2/19/93

----- TCLP HERBICIDES -----

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

<u>PARAMETER</u>	<u>RESULT (mg/L)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
2,4-D	ND	0.5	SW846 8150	2/19- 2/21/93	3050040
2,4,5-TP(Silvex)	ND	0.1	SW846 8150	2/19- 2/21/93	3050040

SURROGATE RECOVERY%ACCEPTABLE LIMITS

2,4-DB

85

(48 - 131)

NOTE: AS RECEIVED

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19179-DP-02 2-17-93 1830

WO #: B8348109
 LAB #: A3B180005-002
 MATRIX: SOLID

DATE RECEIVED: 2/18/93
 TCLP EXTRACTION DATE: 2/19/93

TCLP HERBICIDES

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

<u>PARAMETER</u>	<u>RESULT (mg/L)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
2,4-D	ND	0.5	SW846 8150	2/19- 2/21/93	3050040
2,4,5-TP (Silvex)	ND	0.1	SW846 8150	2/19- 2/21/93	3050040

SURROGATE RECOVERY

%

ACCEPTABLE LIMITS

2,4-DB

73

(48 - 131)

NOTE: AS RECEIVED
 ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19179-13-01 2-18-93 1200

WO #: B8516109

LAB #: A3B190006-002

MATRIX: SOLID

DATE RECEIVED:

2/19/93

TCLP EXTRACTION DATE:

2/20/93

----- TCLP HERBICIDES -----

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

<u>PARAMETER</u>	<u>RESULT (mg/L)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
2,4-D	ND	0.5	SW846 8150	2/20- 2/21/93	3051009
2,4,5-TP(Silvex)	ND	0.1	SW846 8150	2/20- 2/21/93	3051009

SURROGATE RECOVERY%ACCEPTABLE LIMITS

2,4-DB

83

(48 - 131)

NOTE: AS RECEIVED

ND (NONE DETECTED)

2,4-D

ND 0.5

SW846 8150 2/20- 2/21/93 (81009)

BAKER ENVIRONMENTAL INC

19179-13-02 2-18-93 1200

WO #: B8523109

LAB #: A3B190006-004

MATRIX: SOLID

DATE RECEIVED:

2/19/93

TCLP EXTRACTION DATE:

2/20/93

----- TCLP HERBICIDES -----

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

<u>PARAMETER</u>	<u>RESULT (mg/L)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
2,4-D	ND	0.5	SW846 8150	2/20 - 2/21/93	3051009
2,4,5-TP(Silvex)	ND	0.1	SW846 8150	2/20 - 2/21/93	3051009

SURROGATE RECOVERY

%

ACCEPTABLE LIMITS

2,4-DB

83

(48 - 131)

NOTE: AS RECEIVED

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19179-ER-01 2-19-93 1100

WO #: B8694109

LAB #: A3B200001-009

MATRIX: WATER

DATE RECEIVED: 2/20/93

TCLP EXTRACTION DATE: 2/21/93

----- TCLP HERBICIDES -----

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

<u>PARAMETER</u>	<u>RESULT (mg/L)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
2,4-D	ND	0.5	SW846 8150	2/21- 2/22/93	3052001
2,4,5-TP (Silvex)	ND	0.1	SW846 8150	2/21- 2/22/93	3052001

SURROGATE RECOVERY%ACCEPTABLE LIMITS

2,4-DB

63

(48 - 131)

NOTE: AS RECEIVED

ND (NONE DETECTED)

BAKER ENVIRONMENTAL INC

19179-FB-01 2-19-93 1100

WO #: B8685109

LAB #: A3B200001-001

MATRIX: WATER

DATE RECEIVED:

2/20/93

TCLP EXTRACTION DATE:

2/21/93

----- TCLP HERBICIDES -----

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311 (55 FR 26986)

<u>PARAMETER</u>	<u>RESULT (mg/L)</u>	<u>REPORTING LIMIT</u>	<u>METHOD</u>	<u>EXTRACTION- ANALYSIS DATE</u>	<u>QC BATCH</u>
2,4-D	ND	0.5	SW846 8150	2/21- 2/22/93	3052001
2,4,5-TP(Silvex)	ND	0.1	SW846 8150	2/21- 2/22/93	3052001

SURROGATE RECOVERY%ACCEPTABLE LIMITS

2,4-DB

73

(48 - 131)

NOTE: AS RECEIVED

ND (NONE DETECTED)

Enseco-Wadsworth/ALERT Laboratories
EXPANDED DELIVERABLE
FORM 1
Inorganic Analysis Data Sheet

Client Sample#

Lot # A3B220010

Lab Sample ID: B8877T

19197-1620-01

Sample Matrix: TCLP

Concentration Units: ug/L

Analyte	Concentration	C	M
Arsenic	27	U	P
Barium	492	b	P
Cadmium	5	U	P
Chromium	5	b	P
Mercury	1.0	U	CV
Lead	17	U	P
Selenium	89	U	P
Silver	3	U	P

Enseco-Wadsworth/ALERT Laboratories
EXPANDED DELIVERABLE
FORM 1
Inorganic Analysis Data Sheet

Client Sample#

Lot # A3B220010

Lab Sample ID: B8878T

19197-1620-02

Sample Matrix: TCLP

Concentration Units: ug/L

Analyte	Concentration	C	M
Arsenic	27	U	P
Barium	316	b	P
Cadmium	5	U	P
Chromium	5	b	P
Mercury	1.0	U	CV
Lead	31	b	P
Selenium	89	U	P
Silver	3	U	P

Enseco-Wadsworth/ALERT Laboratories
EXPANDED DELIVERABLE
FORM 1
Inorganic Analysis Data Sheet

Client Sample#

Lot # A3B220010

Lab Sample ID: B8879T

19197-1620-03

Sample Matrix: TCLP

Concentration Units: ug/L

Analyte	Concentration	C	M
Arsenic	27	U	P
Barium	1049		P
Cadmium	5	U	P
Chromium	10	b	P
Mercury	1.0	U	CV
Lead	23	b	P
Selenium	89	U	P
Silver	3	U	P

Enseco-Wadsworth/ALERT Laboratories

EXPANDED DELIVERABLE

FORM 1

Inorganic Analysis Data Sheet

Client Sample#

Lot # A3B220010Lab Sample ID: B8880T

19197-1620-04

Sample Matrix: TCLP

Concentration Units: ug/L

Analyte	Concentration	C	M
Arsenic	27	U	P
Barium	415	b	P
Cadmium	5	U	P
Chromium	5	U	P
Mercury	1.0	U	CV
Lead	23	b	P
Selenium	89	U	P
Silver	3	U	P

Enseco-Wadsworth/ALERT Laboratories
EXPANDED DELIVERABLE

FORM 1

Inorganic Analysis Data Sheet

Client Sample#

Lot # A3B220010

Lab Sample ID: B8881T

19197-1620-05

Sample Matrix: TCLP

Concentration Units: ug/L

Analyte	Concentration	C	M
Arsenic	27	U	P
Barium	415	b	P
Cadmium	5	U	P
Chromium	32	b	P
Mercury	1.0	U	CV
Lead	17	U	P
Selenium	89	U	P
Silver	3	U	P

Enseco-Wadsworth/ALERT Laboratories
EXPANDED DELIVERABLE

FORM 1

Inorganic Analysis Data Sheet

Client Sample#

Lot # A3B220010

Lab Sample ID: B8882T

19197-1620-07

Sample Matrix: TCLP

Concentration Units: ug/L

Analyte	Concentration	C	M
Arsenic	27	U	P
Barium	270	b	P
Cadmium	5	U	P
Chromium	5	U	P
Mercury	1.0	U	CV
Lead	17	U	P
Selenium	89	U	P
Silver	3	U	P

Enseco-Wadsworth/ALERT Laboratories
EXPANDED DELIVERABLE
FORM 1

Inorganic Analysis Data Sheet

Client Sample#

Lot # A3B220010

Lab Sample ID: B8883T

19197-1620-06

Sample Matrix: TCLP

Concentration Units: ug/L

Analyte	Concentration	C	M
Arsenic	27	U	P
Barium	354	b	P
Cadmium	10	b	P
Chromium	5	b	P
Mercury	1.0	U	CV
Lead	231		P
Selenium	89	U	P
Silver	3	U	P

Enseco-Wadsworth/ALERT Laboratories
EXPANDED DELIVERABLE
FORM 1
Inorganic Analysis Data Sheet

Client Sample#

Lot # A3B180005

Lab Sample ID: B8345T

19179-DP-01

Sample Matrix: TCLP

Concentration Units: ug/L

Analyte	Concentration	C	M
Arsenic	27	U	P
Barium	2173		P
Cadmium	7	b	P
Chromium	9	b	P
Mercury	1.0	U	CV
Lead	804		P
Selenium	89	U	P
Silver	3	U	P

Enseco-Wadsworth/ALERT Laboratories
EXPANDED DELIVERABLE
FORM 1
Inorganic Analysis Data Sheet

Client Sample#

Lot # A3B180005

Lab Sample ID: B8348T

19179-DP-02

Sample Matrix: TCLP

Concentration Units: ug/L

Analyte	Concentration	C	M
Arsenic	27	U	P
Barium	1232		P
Cadmium	10	b	P
Chromium	5	U	P
Mercury	1.0	U	CV
Lead	935		P
Selenium	89	U	P
Silver	3	U	P

Enseco-Wadsworth/ALERT Laboratories
EXPANDED DELIVERABLE
FORM 1
Inorganic Analysis Data Sheet

Client Sample#

Lot # A3B190006

Lab Sample ID: B8516T

19179-12-01

Sample Matrix: TCLP

Concentration Units: ug/L

Analyte	Concentration	C	M
Arsenic	27	U	P
Barium	1112		P
Cadmium	5	b	P
Chromium	5	U	P
Mercury	1.0	U	CV
Lead	364		P
Selenium	89	U	P
Silver	3	U	P

Enseco-Wadsworth/ALERT Laboratories
EXPANDED DELIVERABLE
FORM 1
Inorganic Analysis Data Sheet

Client Sample#

Lot # A3B190006

Lab Sample ID: B8523T

19179-13-02

Sample Matrix: TCLP

Concentration Units: ug/L

Analyte	Concentration	C	M
Arsenic	27	U	P
Barium	943		P
Cadmium	5	U	P
Chromium	8	b	P
Mercury	1.0	U	CV
Lead	126		P
Selenium	89	U	P
Silver	3	b	P

Enseco-Wadsworth/ALERT Laboratories
EXPANDED DELIVERABLE
FORM 1
Inorganic Analysis Data Sheet

Client Sample#

Lot # A3B200001

Lab Sample ID: B8685T

19179-FB-01

Sample Matrix: TCLP

Concentration Units: ug/L

Analyte	Concentration	C	M
Arsenic	27	U	P
Barium	23	b	P
Cadmium	5	U	P
Chromium	5	U	P
Mercury	1.0	U	CV
Lead	17	U	P
Selenium	89	U	P
Silver	3	U	P

Enseco-Wadsworth/ALERT Laboratories
EXPANDED DELIVERABLE
FORM 1

Inorganic Analysis Data Sheet

Client Sample#

Lot # A3B200001

Lab Sample ID: B8694T

19179-ER-01

Sample Matrix: TCLP

Concentration Units: ug/L

Analyte	Concentration	C	M
Arsenic	27	U	P
Barium	5	b	P
Cadmium	5	U	P
Chromium	5	U	P
Mercury	1.0	U	CV
Lead	17	U	P
Selenium	89	U	P
Silver	4	b	P

APPENDIX C
SUPPORT DOCUMENTATION

Enseco-Wadsworth/ALERT Laboratories
EXPANDED DELIVERABLE
FORM 3
BLANKS

Lot# A3B220010
Analysis date 2-22-93

Prep blank matrix TCLP
Prep blank conc. units ug/L

Enseco-Wadsworth/ALERT Laboratories

EXPANDED DELIVERABLE

FORM 3

BLANKS

Lot# A3B186005

Analysis date 2-21-93

Prep blank matrix

TCUP

Prep blank conc. units ug/L

**Enseco-Wadsworth/ALERT Laboratories
EXPANDED DELIVERABLE**

FORM 3

BLANKS

A3B190006
Lot# A3B200001
Analysis date 2-22-93

Prep blank matrix TCP

Prep blank conc. units ug/L

Enseco-Wadsworth/ALERT Laboratories
EXPANDED DELIVERABLE

A3B190006
Lot# A3B200001
Analysis date 2-22-93

**FORM 3
BLANKS**

Prep blank matrix

Prep blank conc. units ug/L